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Water Resources Data for New Jersey
Volume 1: Atlantic Slope Basins
Hudson River to Cape May

(U.S.) Geological Survey
Trenton, NJ

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U.S. Department of Commerce
National Technical Information Service
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Water Resources Data for New Jersey

Volume 1. Atlantic Slope Basins, Hudson River to Cape May

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-80-1

WATER YEAR 1980

Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

REPRODUCED BY
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

CALENDAR FOR WATER YEAR 1980

1979

OCTOBER

S	M	T	W	T	F	S
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1980

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SEPTEMBER

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28	29	30				

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

Water Resources Data for New Jersey

Volume 1. Atlantic Slope Basins, Hudson River to Cape May

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-80-1

WATER YEAR 1980

Prepared in cooperation with the New Jersey
Department of Environmental Protection and
with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Doyle G. Frederick, Acting Director

For additional information write to
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U.S. Geological Survey
Room 430, Federal Building
402 East State Street
Trenton, New Jersey 08608

1981

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Jersey and with other agencies by personnel of the New Jersey district of the Water Resources Division under the supervision of D. E. Vaupel, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of Philip Cohen, Chief Hydrologist, U.S. Geological Survey and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

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Water resources data for the 1980 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 75 gaging stations; tide summaries for one (1) station; stage and contents for 15 lakes and reservoirs; water quality for 84 surface-water sites and 108 wells; and water levels for 34 observation wells. Also included are data for 43 crest-stage partial-record stations; 22 tidal crest-stage gages; and 47 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the national water data system operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

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CONTENTS

Page
Preface III
List of surface-water stations, in downstream order, for which records are published VI
List of ground-water stations, by county, for which records are published VIII
Introduction 1
Cooperation 1
Acknowledgments 1
Hydrologic conditions 2
Definition of terms 2
Downstream order and station number 8
Numbering system for wells and miscellaneous sites 8
Special networks and programs 9
Explanation of stage and water-discharge records 9
  Collection and computation of data 9
  Accuracy of field data and computed results 11
  Publications 11
  Other data available 11
  Records of stage or discharge collected by agencies other than the Geological Survey 11
Explanation of water-quality records 11
  Collection and examination of data 11
  Water temperatures 12
  Sediment 12
  Remark codes for water-quality data 13
  Publications 13
Explanation of ground-water level records 13
  Collection of the data 13
  Publications 13
Selected references 14
Publications on techniques of water-resources investigations 16
Surface-water records 26
Discharge at partial-record stations and miscellaneous sites 296
  Low-flow partial-record stations 296
  Crest-stage partial-record stations 302
  Miscellaneous sites 308
Tidal crest-stage stations 310
Analyses of samples collected at sediment partial-record stations 213
Ground-water records 332
  Ground water level records 332
  Quality of ground water records 352
Index 359

ILLUSTRATIONS

Figure 1. Well locations system 8
2. Monthly streamflow at key gaging stations 17
3. Annual mean discharge at key gaging stations 18
4. Monthly ground-water levels at key observation wells 19
5. Map showing location of gaging stations, and surface-water quality stations 20
6. Map showing location of low-flow and crest-stage partial-record stations 22
7. Map showing location of ground-water stations quality stations and observation wells 24

TABLES

Table 1. Degrees Celsius (°C) to degrees Fahrenheit (°F) 12
2. Water-supply paper numbers, surface-water quality records, water years 1945-70 13
3. Water-supply paper numbers, ground-water level records, water year 1935-74 14
Factors for converting Inch-pound units to Metric units ..... inside back cover

SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological,(e) elevation, gage height or contents, (t) water temperature, (s) sediment]

Page

HUDSON RIVER BASIN

Rondout Creek:

Wallkill River at outflow of Lake Mohawk, at Sparta (cm) 26
Wallkill River at Franklin (cm) 28
Wallkill River near Sussex (cm) 30
Papakating Creek at Sussex (cm) 32
Wallkill River near Unionville, NY (d) 34
Black Creek (head of Pochuck Creek) near Vernon (cm) 35

HACKENSACK RIVER BASIN

Hackensack River at West Nyack, NY (d) 37
Hackensack River at Rivervale (dcm) 38
Pascack Brook at Westwood (d) 40
Hackensack River at New Milford (d) 41
Reservoirs in Hackensack River basin (e) 42
Diversions in Hackensack River basin 43

PASSAIC RIVER BASIN

Passaic River near Millington (dcm) 44
Passaic River near Chatham (dcm) 47
Rockaway River above reservoir, at Boonton (d) 50
Rockaway River below reservoir, at Boonton (d) 51
Rockaway River at Pine Brook (cm) 52
Whippany River at Morristown (dcm) 54
Whippany River near Pine Brook (cm) 57
Passaic River at Pine Brook (d) 59
Passaic River at Two Bridges (cm) 60

Pompton River:

Pequannock River (head of Pompton River) at Macopin intake dam (d) 62
Wanaque River at Awosting (d) 63
Wanaque River at Monks (d) 64
Wanaque River at Wanaque (dcmt) 65
Ramapo River at Suffern, NY (d) 69
Mahwah River near Suffern, NY (d) 71
Ramapo River near Mahwah (dcm) 72
Ramapo River at Pompton Lakes (d) 75
Pompton River at Pompton Plains (d) 76
Pompton River at Packanack Lake (cm) 77
Passaic River at Rt. 46 at Singac (cm) 79
Passaic River at Little Falls (dbcmts) 80
Passaic River at Rt. 46 at Elmwood Park (cm) 88
Saddle River at Ridgewood (d) 89
Hohokus Brook at Hohokus (d) 90
Saddle River at Fair Lawn (cm) 91
Saddle River at Lodi (dcm) 93
Third River at Passaic (d) 96
Reservoirs in Passaic River basin (e) 97
Diversions in Passaic River basin 100

ELIZABETH RIVER BASIN

Elizabeth River at Ursino Lake, at Elizabeth (dcm) 101

RAHWAY RIVER BASIN

Rahway River near Springfield (dcm) 104
Rahway River at Rahway (dcm) 107
Robinsons Branch Rahway River at Maple Avenue at Rahway (dcm) 110

RARITAN RIVER BASIN

South Branch Raritan River at outlet Budd Lake (cm) 113
South Branch Raritan River at Middle Valley (cm) 115
South Branch Raritan River near High Bridge (d) 117
South Branch Raritan River at Arch Street, at High Bridge (cm) 118
Spruce Run at Glen Gardner (d) 119
Spruce Run near Glen Gardner (cm) 120
Mulhockaway Creek at Van Syckel (dcm) 122
Spruce Run at Clinton (dcmt) 125
South Branch Raritan River at Stanton (d) 128
Prescott Brook at Round Valley (cm) 129

South Branch Raritan River:

Bushkill Brook at Rockefellows Mills (cm) 131
South Branch Raritan River at Three Bridges (cm) 133
Neshanic River at Reaville (dcm) 135

Back Brook:

Back Brook tributary near Ringoes (d) 138
South Branch Raritan River at South Branch (cm) 139
Holland Brook at Readington (d) 141
North Branch Raritan River near Chester (cm) 142
North Branch Raritan River near Far Hills (dcm) 144
North Branch Raritan River at Burnt Mills (cm) 146
Lamington (Black) River at Succasunna (d) 148
Lamington (Black) River near Ironia (dcm) 149
Lamington (Black) River near Pottersville (dcm) 152
Upper Cold Brook near Pottersville (d) 155
Lamington (Black) River tributary No. 2 near Pottersville (d) 156
Lamington (Black) River at Lamington (cm) 157

South Branch Rockaway Creek:

South Branch Rockaway Creek tributary at Lebanon (cm) 159
South Branch Rockaway Creek at Whitehouse (d) 161
Rockaway Creek at Whitehouse (dcm) 162
Lamington (Black) River at Burnt Mills (cm) 165
North Branch Raritan River at North Branch (d) 167

SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

RARITAN RIVER BASIN--Continued

North Branch Raritan River near Raritan (d) 168
Raritan River at Raritan (cm) 169
Peters Brook near Raritan (d) 171
Raritan River at Manville (dcm) 172
Millstone River at Applegarth (cm) 175
Millstone River at Grovers Mill (cm) 177
Stony Brook at Princeton (dcm) 179
Heathcote Brook at Kingston (cm) 182
Millstone River at Kingston (cm) 184
Beden Brook near Rocky Hill (cm) 186
Pike Run at Belle Mead (d) 188
Millstone River at Blackwells Mills (d) 189
Millstone River at Weston (cm) 190
Royce Brook:
Royce Brook tributary near Belle Mead (d) 192
Raritan River below Calco Dam, at Bound Brook (d) 193
Middle Brook:
West Branch Middle Brook near Martinsville (d) 194
Bound Brook:
Green Brook at Seeley Mills (d) 195
Green Brook at Plainfield (d) 196
Stony Brook:
East Branch Stony Brook at Watchung (d) 197
Stony Brook at Watchung (d) 198
Raritan River near South Bound Brook (cbms) 199
Lawrence Brook at Davidsons Mill Road, near Patricks Corner (cm) 206
Lawrence Brook at Farrington Dam (d) 207
Lawrence Brook at Westons Mills (cm) 208
South River:
Matchaponix Brook (head of South River) near Englishtown (cm) 209
Barclay Brook near Englishtown (cm) 211
Matchaponix Brook at Mundy Avenue, at Spotswood (cm) 213
Manalapan Brook at Federal Road near Manalapan (cm) 215
Manalapan Brook at Spotswood (d) 217
Manalapan Brook at Bridge Street at Spotswood (cm) 218
South River at Old Bridge (d) 220
South River below Duhernal Dam at Old Bridge (cm) 221
Reservoirs in Raritan River basin (e) 222
Diversions in Raritan River basin 223

NAVESINK RIVER BASIN

Swimming River:

Hop Brook:

Willow Brook near Holmdel (cm) 224
Yellow Brook at Colts Neck (cm) 226
Swimming River (head of Navesink River) near Red Bank (dcm) 228

SHARK RIVER BASIN

Shark River near Neptune City (dcm) 231
Jumping Brook near Neptune City (cm) 234

MANASQUAN RIVER BASIN

Manasquan River near Georgia (cm) 236
Marsh Bog Brook at Squankum (cm) 238
Manasquan River at Squankum (d) 240

METEDECONK RIVER BASIN

North Branch Metedeconk River near Wyckoff Mills (cm) 241
North Branch Metedeconk River near Lakewood (d) 243

TOMS RIVER BASIN

Toms River near Toms River (dcbmts) 244

OYSTER CREEK BASIN

Oyster Creek near Brookville (d) 253

WESTECUNK CREEK BASIN

Westecunk Creek at Stafford Forge (d) 254

MULLICA RIVER BASIN

Mullica River at outlet of Atsion Lake, at Atsion (cm) 255
Mullica River near Batsto (d) 257
Mullica River at Pleasant Mills (cm) 258
Hammonton Creek at Wescoatville (cm) 260
Batsto River at Batsto (dcm) 261
Batsto River at Pleasant Mills (e) 264
West Branch Wading River near Jenkins (dc) 265
West Branch Wading River at Maxwell (dcbmts) 270
Oswego River at Harrisville (dcm) 275
Bass River:
East Branch Bass River near New Gretna (dcm) 278

ABSECON CREEK BASIN

Absecon Creek at Absecon (d) 281

GREAT EGG HARBOR RIVER BASIN

Great Egg Harbor River near Sicklerville (cm) 282
Great Egg Harbor River near Blue Anchor (cm) 284
Great Egg Harbor River at Folsom (dct) 286
Great Egg Harbor River at Weymouth (cm) 292

TUCKAHOE RIVER BASIN

Tuckahoe River at Head of River (dcm) 294

GROUND WATER STATIONS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

Page

GROUND-WATER LEVEL RECORDS

Atlantic County........ 332
Burlington County........ 334
Camden County........ 336
Cumberland County........ 337
Essex County........ 338
Mercer County........ 338
Middlesex County........ 339
Monmouth County........ 342
Morris County........ 346
Ocean County........ 347
Passaic County........ 351
Union County........ 351

QUALITY OF GROUND WATER RECORDS

Atlantic County........ 352
Cape May County........ 353
Middlesex County........ 354
Monmouth County........ 355
Ocean County........ 357

INTRODUCTION

Water resources data for the 1980 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, and contents of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 75 gaging stations; tide summaries for 1 station; stage and contents for 15 lakes and reservoirs; water quality for 84 surface water sites and 108 wells; and water levels for 34 observation wells. Also included are data for 43 crest-stage partial-record stations, 22 tidal crest-stage gages and 51 low-flow partial-record stations. Locations of these sites are shown in figures 5, 6, and 7. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume of the report is identified as "U.S. Geological Survey Water-Data Report NJ-80-1." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (609) 989-2162.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Jerry F. English, commissioner.
  Division of Water Resources, Arnold Schiffman, director.
  Division of Fish, Game and Wildlife, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Alampi, secretary.
  Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, Gerald M. Hansler, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
County of Camden, Joseph T. Patermo, director of Camden County Planning Board.
County of Morris, James Plante, chairman of Morris County Municipal Utilities Authority.
County of Somerset, Thomas E. Decker, county engineer, and Thomas Harris, administrative engineer.
Township of West Windsor, Larry Ellery, chairman of Environmental Commission.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 50 surface water stations, and for the collection of sediment records at four stream-sampling stations, and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service and the National Ocean Survey.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark, New Brunswick and Spotswood; American Cyanamid Co.; Commonwealth Water Co.; Elizabethtown Water Co.; Ewing-Lawrence Sewerage Authority; Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENTS

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HYDROLOGIC CONDITIONS

Water year 1980 began with streamflow above the normal range throughout New Jersey. February precipitation was only 35 percent of normal causing streams to drop below normal. Above normal rainfall during March and April kept runoff normal or above normal through May. Starting in May, precipitation was below average for the rest of the water year for most of the State. Runoff declined steadily from May through September. On September 27 the Governor of New Jersey ordered mandatory water rationing in 114 northern New Jersey communities due to declining reservoir levels.

Monthly and annual discharges are compared with medians at three representative gaging stations in figures 2 and 3. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 140 ft^3/s (3.96 m^3/s), 116 percent of normal. The average flow for Great Egg Harbor River at Folsom was 90.0 ft^3/s (2.55 m^3/s), 103 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 11,500 ft^3/s (325.7 m^3/s), 90 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 93 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey decreased from 67.9 billion gallons (90 percent of capacity) on October 1 to 35.2 billion gallons (47 percent of capacity) on September 30. Storage in Wanaque Reservoir decreased from 24.2 billion gallons (86 percent of capacity) on October 1 to 12.3 billion gallons (44 percent of capacity) on September 30. Pumped storage in Round Valley Reservoir decreased from 54.5 billion gallons (99 percent of capacity) on October 1 to 45.4 billion gallons (83 percent of capacity) on September 30.

Water levels in water-table aquifers in the Coastal Plain portion of the State generally were above normal from October to April and near-normal during the remainder of the water year. Water levels in the heavily stressed artesian aquifers; however, continued to be lower than normal in the Coastal Plain. Declines in water levels were most notable in the Englishtown aquifer and aquifers in the Potomac-Raritan-Magothy aquifer system. Data for 32 wells which tap these artesian aquifers were published this year. Water levels in 18 of the wells in this group established new lows of record. In the northern portion of the State, north of the Fall Line, water levels in water-table, semi-artesian, and artesian aquifers varied from near normal to moderately below normal.

Monthly water levels are compared with long-term averages at two representative observation wells in figure 4. The wells chosen for illustration were Whites Lab. 3 in Union County and Crammer in Ocean County. Ten-year hydrographs for other selected wells also are included in these reports under the ground-water level records for the specific wells.

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, are defined below. See also the table for converting Inch-pound Units to Metric Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life processes. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Aquifer codes and geologic names:

The following list shows the aquifer codes and geologic names of the formations in which the sampled wells are finished. The aquifer codes also appear in the column "Geologic Unit" in the ground-water quality tables:

112CPMY , CAPE MAY FORMATION, UNDIFFERENTIATED
112ESRNS , CAPE MAY FORMATION, ESTUARINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND, UNDIFFERENTIATED
112TILL , GLACIAL TILL
112OTS4 , STRATIFIED DRIFT
121CNSY , COHANSEY SAND
121CKKD , COHANSEY SAND-KIRKWOOD FORMATION, UNDIFFERENTIATED
122KRKDU , KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL , KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED
124PNPN , PINEY POINT FORMATION
211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRR , POTOMAC-RARITAN-MAGOTHY AQUIFER SYSTEM
211ODBG , MAGOTHY FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER
231BRCK , BRUNSWICK SHALE OR FORMATION
231SCKN , STOCKTON FORMATION

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, other perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3) and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the quantity of organic matter which can be chemically oxidized in the presence of a strong oxidant.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.
3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, and artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Depth of well:

Total depth of well is the maximum depth in feet below land surface datum (lsd) at which the well was originally finished. This depth may be slightly deeper than "depth to the bottom of sample interval" because many wells have a "tailpiece" or short length of casing installed below the well screen.

Total depth of hole is the total depth in feet below land surface datum to which the hole was drilled, regardless of the finished depth of the well.

Depth to the top of water-bearing zone is the depth in feet, based on the best available information which indicates the top of the water-bearing zone that is furnishing water to the well.

Depth to bottom of water-bearing zone is the depth in feet, based on the best available information which indicates the bottom of the water-bearing zone that is furnishing water to the well.

Depth to the top of sample interval is the uppermost point in a fully cased well at which water can enter the well. In bedded sediments this is usually the uppermost part of the screened interval. In some wells the top of the well screen is installed inside and a few feet above the bottom of the casing. Under these conditions the bottom of the casing is considered to be the top of the sample interval.

Depth to the bottom of sample interval is the lowermost point in a fully cased well at which water can enter the well.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of the evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Instantaneous flow rate is the flow rate at which water is removed from the well. Used with pump or flow period prior to sampling (see below) so that the exact volume of water pumped prior to sampling can be determined.

Land-surface datum is a datum plane that is approximately at the land surface at the well.

Low tide is the minimum height reached by each falling tide.

Mean high or low tide is the average of all high or low tides, respectively, over a specified period.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synethetic detergent compounds.

Micrograms per gram (UG/G) is a unit expressing the concentration of a chemical element as the weight (micrograms) of the element sorbed per unit weight (gram) of sediment.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in Hem (1970).

National Geodetic Vertical Datum of 1929 (NGVD of 1929). A geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada, formerly called "Mean Sea Level."

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematially over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in active water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (PCI, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/m^2/time for periphyton and macrophytes and mg C/m^3/time for phytoplankton] are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity that the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/m^2/time for periphyton and macrophytes and mg O_2/m^3/time for phytoplankton] are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Pump or flow rate prior to sampling is used in conjunction with the instantaneous flow rate so that the exact volume of water pumped prior to sampling can be determined.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having an atomic weight of 35.453.

Radioisotopes that are determined in this report are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PCI/L, (pCi/L, picocuries per liter), gross beta in PCI/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Supended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content of the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization by organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total" (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample).

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is being transported in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Unique well number is a hyphenated, 6-digit identification number which is assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) System. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. These unique well numbers are being used now in the ground-water level descriptions, wells sampled for water-quality analyses, and on the corresponding location maps in these reports.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. Prior to 1975, WRD was used, which was the abbreviation for "Water-Resources Data."

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of triburtaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, they are assigned sequential numbers "01", "02", etc. as one would for wells. See figure 1 below.

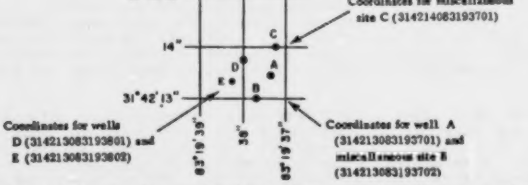
31°42'15"
Coordinates for miscellaneous site C (314214083193701)
C
14"
D
A
E
B
31°42'13"
Coordinates for wells D (314213083193801) and E (314213083193802)
83°19'39"
38"
83°19'37"
Coordinates for well A (314213083193701) and miscellaneous site B (314213083193702)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in stream where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are decribed in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharge are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage height are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first the extremes for current year, second, the extremes for the period of record, and last information available outside the period of record. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water record for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 30 sites during the water years October 1960 to current year by the following agencies: records at 4 sites were collected by the North Jersey District Water Supply Commission; at 14 sites by Passaic County, at 1 sites by the National Weather Service; at 3 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for water-quality data, extremes of the pertinent data, and general remarks. For ground-water sampling stations, no descriptive statements are presented. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes the concentrations of individual constituents and certain properties such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identifications of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 1 below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," and table for converting Inch-pound Units to International System Units, inside back cover).

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
0.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed at the end of this section. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Greeson and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through many vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office (for address see Page IV).

The quality of ground water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are collected after prepumping the well and are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

Remark codes for water-quality data

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
K	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

Publications

Table 2 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey.

Table 2.--Water-supply paper (WSP) numbers, water years, 1945-70

Year	WSP	Year	WSP	Year	WSP
1945	1030	1954	1350	1963	1947
1946	1050	1955	1400	1964	1954
1947	1102	1956	1450	1965	1961
1948	1132	1957	1520	1966	1991
1949	1162	1958	1571	1967	2011
1950	1186	1959	1641	1968	2091
1951	1197	1960	1741	1969	2141
1952	1250	1961	1881	1970	2151
1953	1290	1962	1941		

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 1) and (2) a local name and a unique well number that are provided for local needs.

Water-level measurements in this report are given in feet with reference to land-surface datum (LSD, lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum above NGVD 1929, and the height of the measuring point (MP) above or below land-surface datum is given in each well description.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level data in these reports were obtained from water-level recorders, water-level extremes recorders, and from periodic manual measurements. The equipment used at each well is described in the well description under the listing "Instrumentation." Water levels in wells equipped with water-level recorders are reported for every fifth day and the end of each month (eom). Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrance of the extremes (highest and lowest water levels) are unknown. In these reports the extreme water levels are given along with the interim dates in the well descriptions, and the manual only measurements are tabulated below the well descriptions and also plotted in hydrographs where provided.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whearess the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Table 3 on next page, shows the series of water-supply papers that give ground-water level data for New Jersey, 1935 to 1974. No water-level data were published in 1975. Beginning in 1976, ground-water level data for New Jersey have been published in these annual water data reports.

Table 3.--Water-supply paper (WSP) numbers, water years, 1935-74

Year	WSP	Year	WSP	Year	WSP
1935	777	1944	1016	1953	1265
1936	817	1945	1023	1954	1321
1937	840	1946	1071	1955	1404
1938	845	1947	1096	1956-57	1537
1939	866	1948	1126	1958-62	1782
1940	906	1949	1156	1963-67	1977
1941	936	1950	1165	1968-72	2140
1942	986	1951	1191	1973-74	2164
1943	986	1952	1221		

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NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

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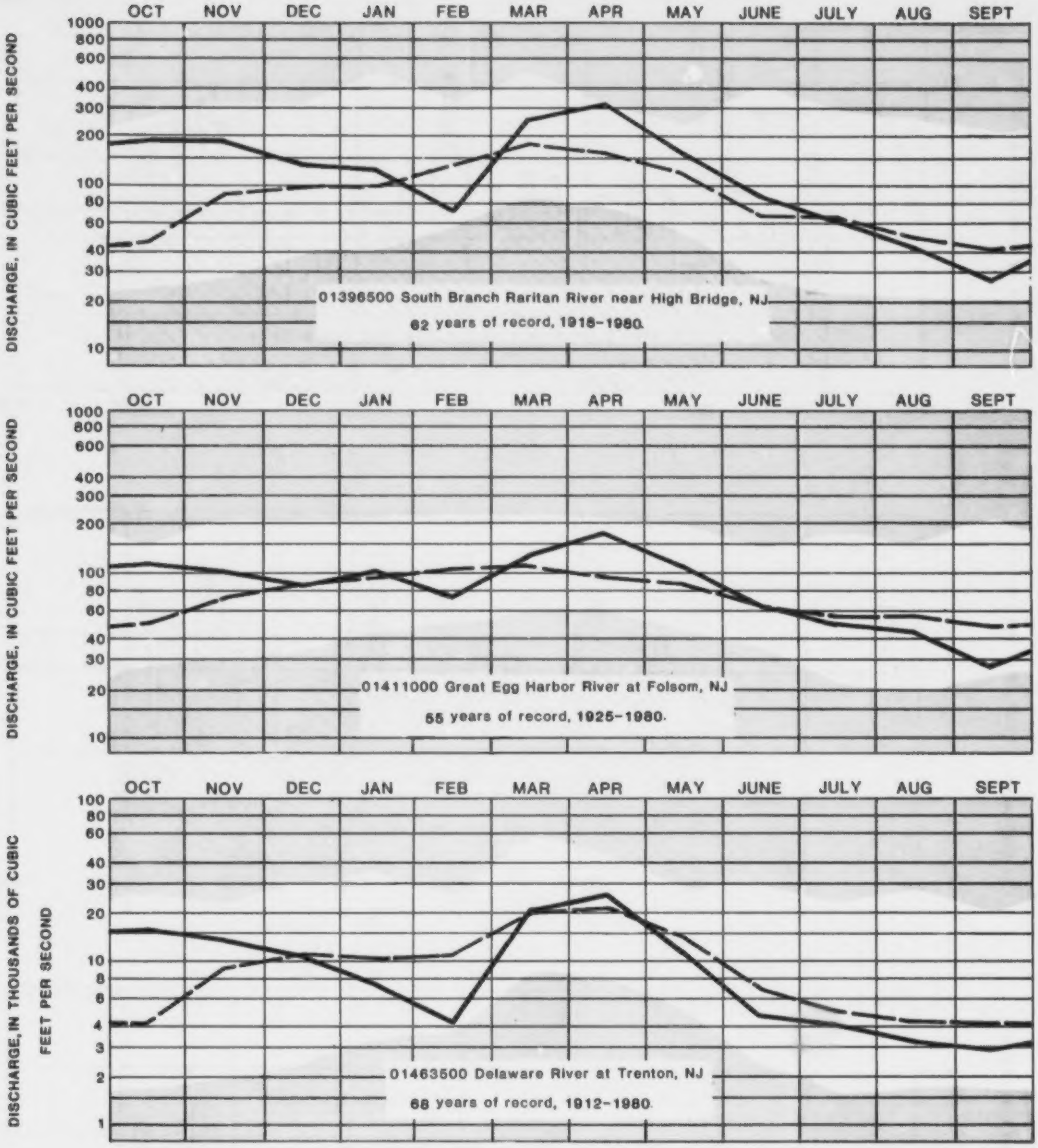


Unshaded area.--Indicates range between highest and lowest mean recorded for the month, prior to 1980 water year.

Dashed line.--Indicates normal (median of the monthly means) for the standard reference period, 1941-1970.

Solid line.--Indicates observed monthly mean flow for the 1980 water year.

FIGURE 2.--MONTHLY STREAMFLOW AT KEY GAGING STATIONS.

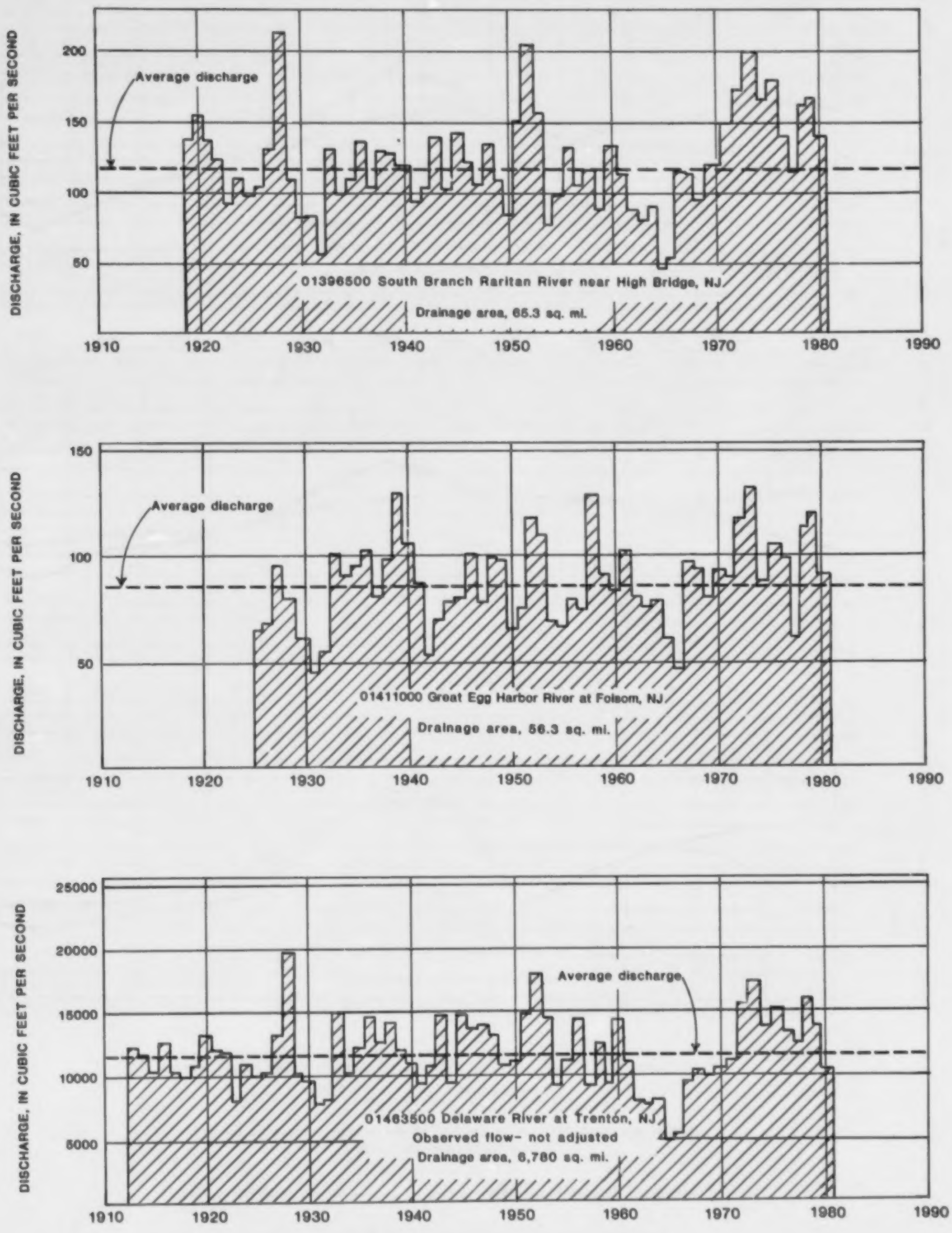
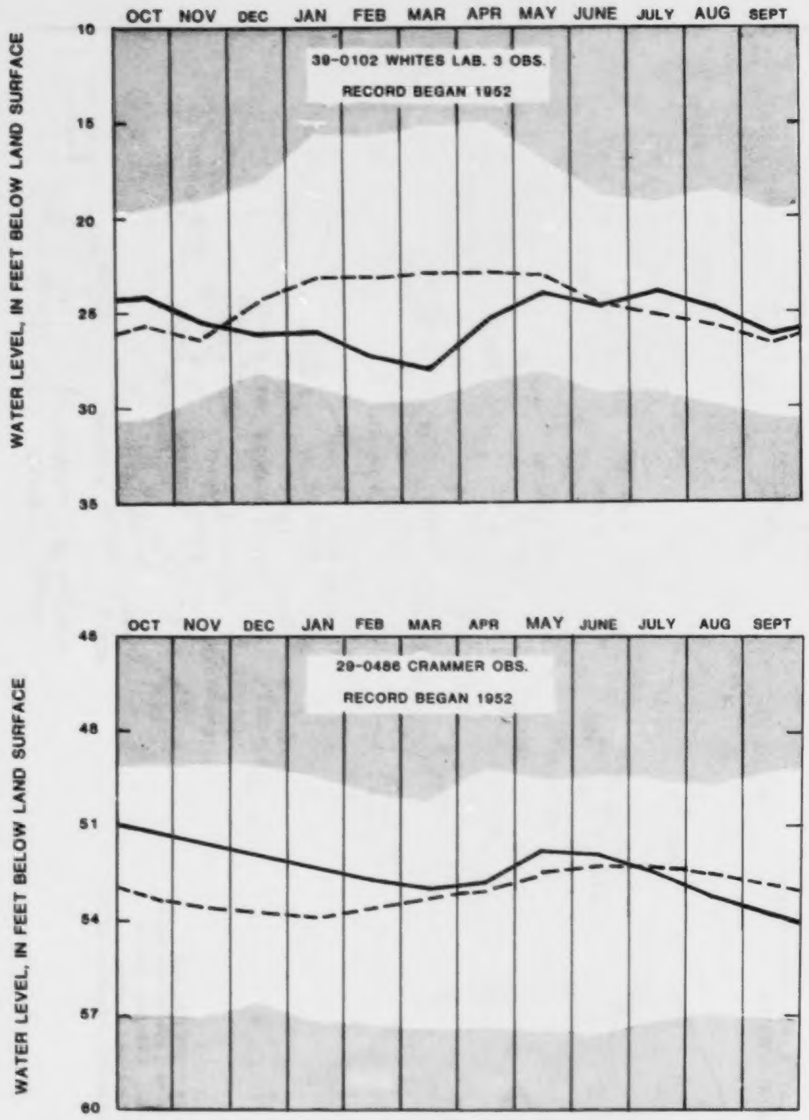


FIGURE 3.--ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS



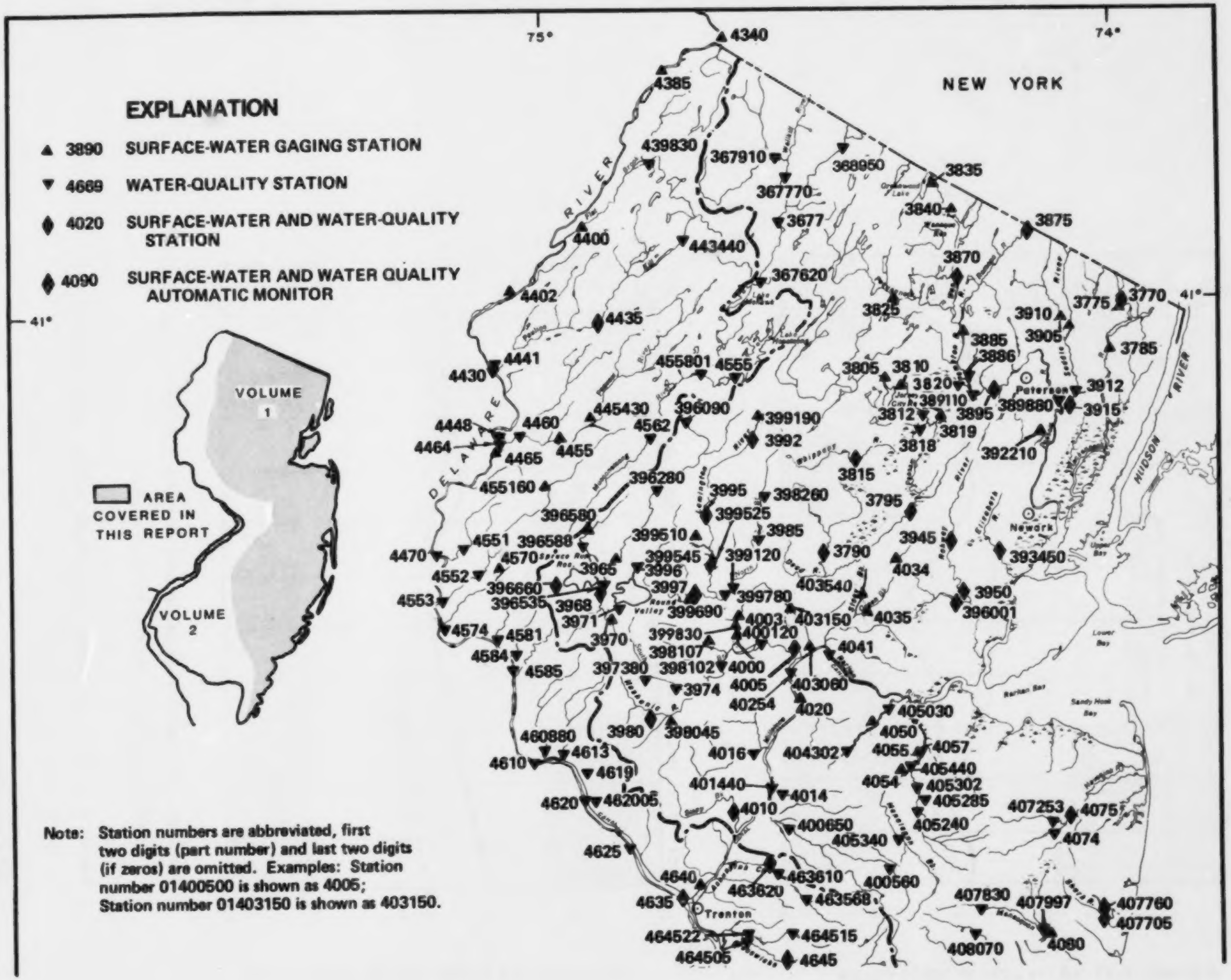
Unshaded area.--Indicates range between highest and lowest recorded monthly minimum water levels, prior to the current year.

Dashed line.--Indicates average of the monthly minimum water levels, prior to current year.

Solid line.--Indicates monthly minimum water level for the current year.

FIGURE 4.--MONTHLY GROUND - WATER LEVELS AT KEY OBSERVATION WELLS.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



EXPLANATION

▲	3890	SURFACE-WATER GAGING STATION
▼	4669	WATER-QUALITY STATION
◆	4020	SURFACE-WATER AND WATER-QUALITY STATION
◆	4090	SURFACE-WATER AND WATER QUALITY AUTOMATIC MONITOR

Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01400500 is shown as 4005; Station number 01403150 is shown as 403150.

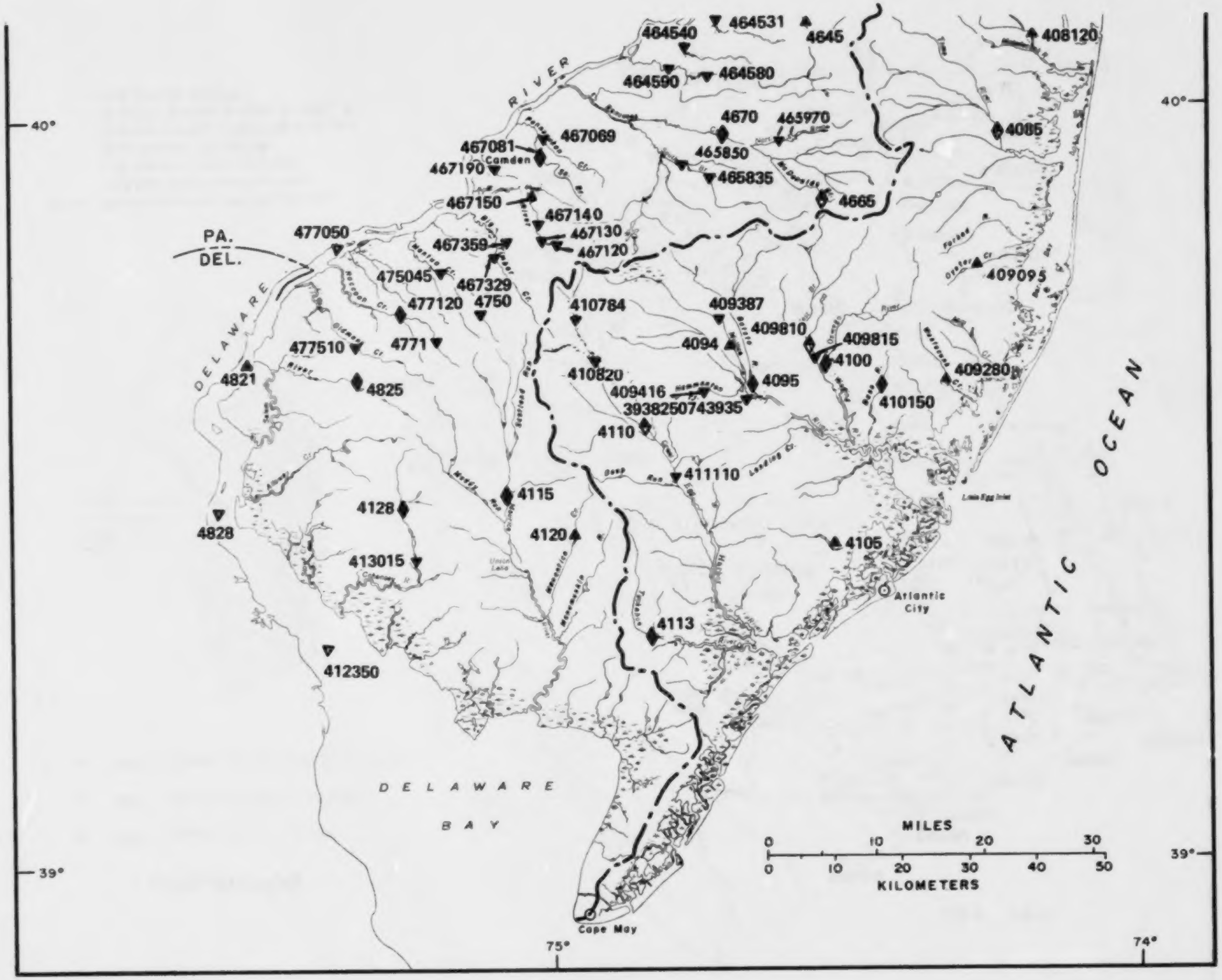
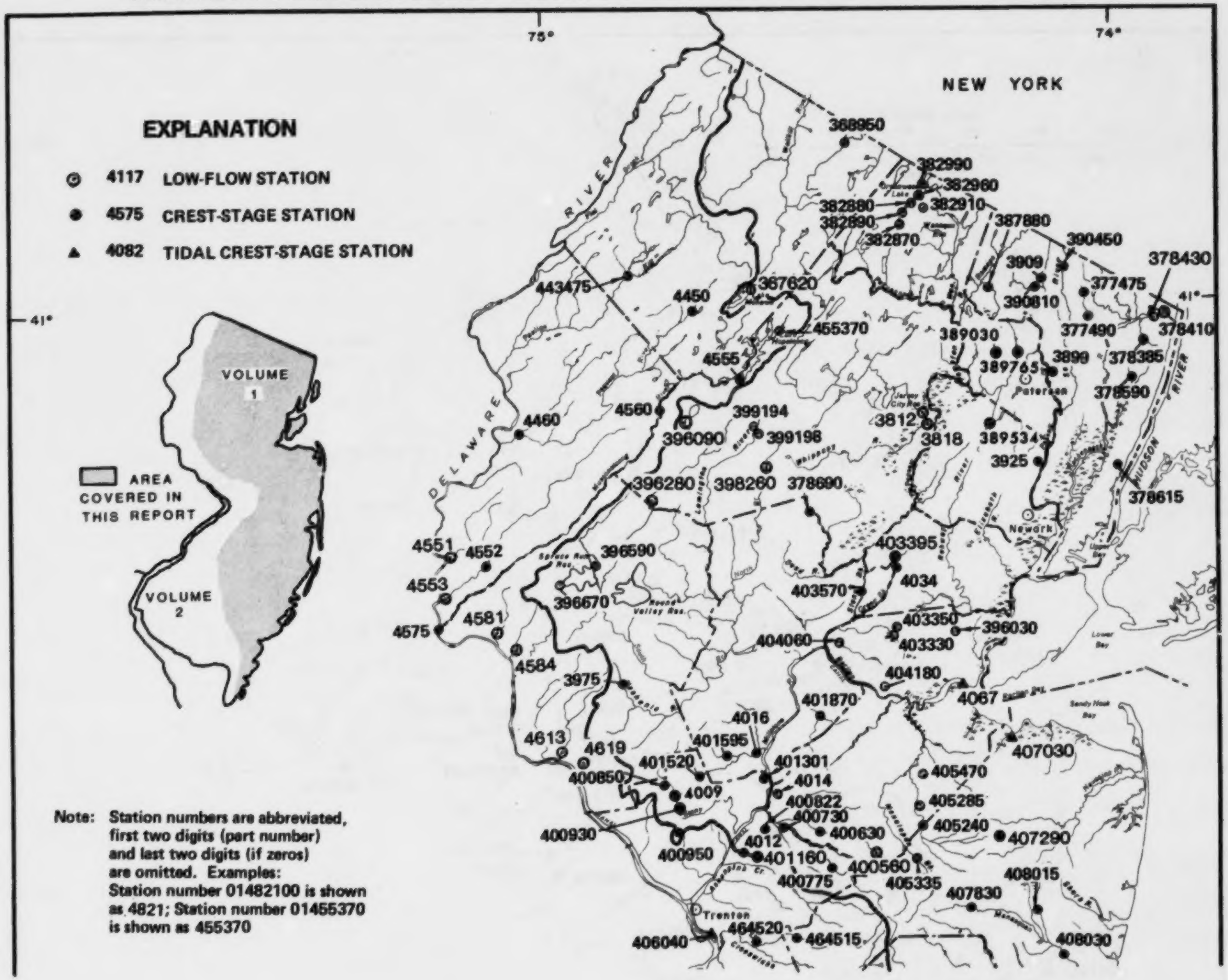


Figure 5.--Location of surface-water gaging stations and water-quality stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



EXPLANATION

- ⊙ 4117 LOW-FLOW STATION
- ● 4575 CREST-STAGE STATION
- ▲ 4082 TIDAL CREST-STAGE STATION

Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01482100 is shown as 4821; Station number 01455370 is shown as 455370

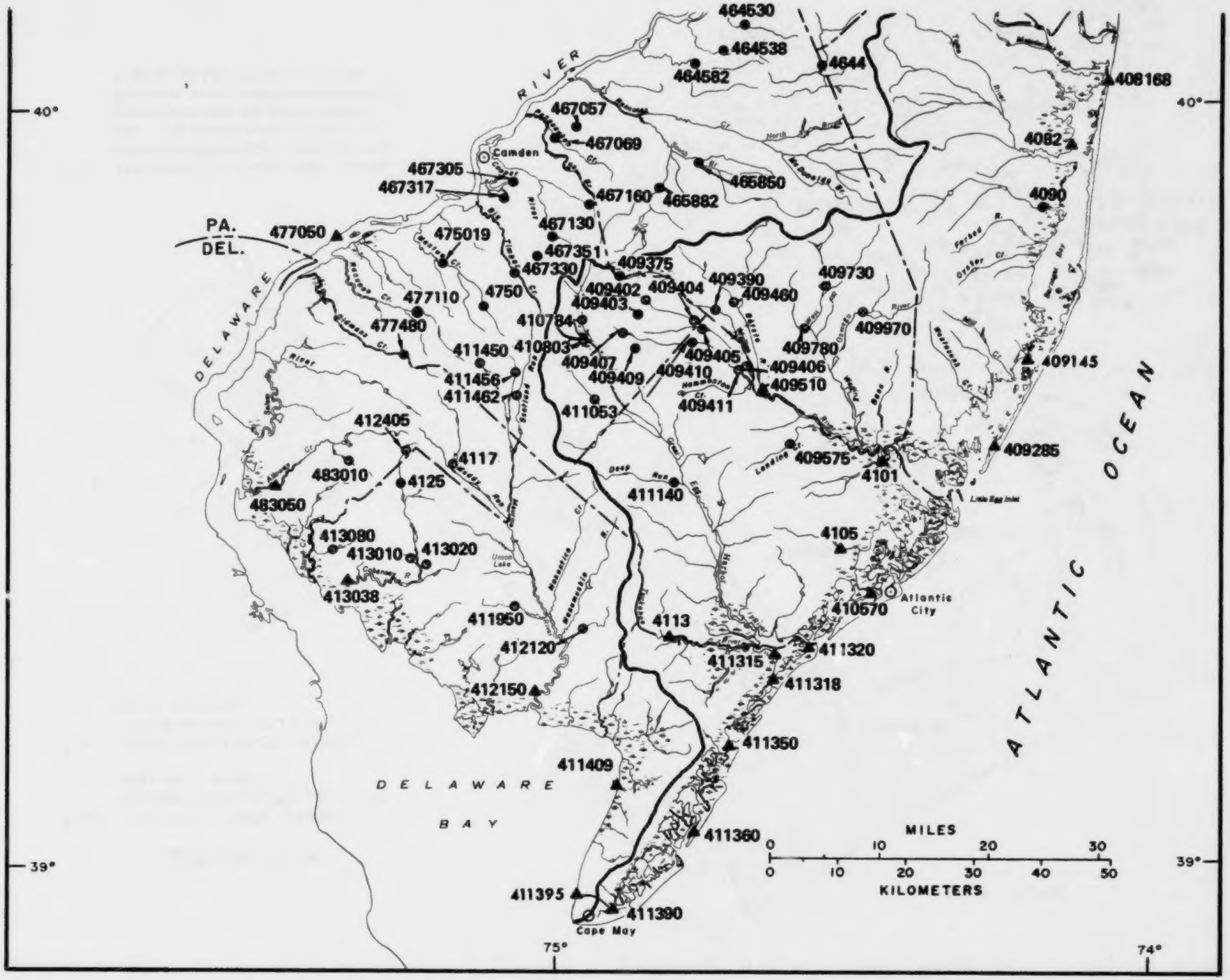
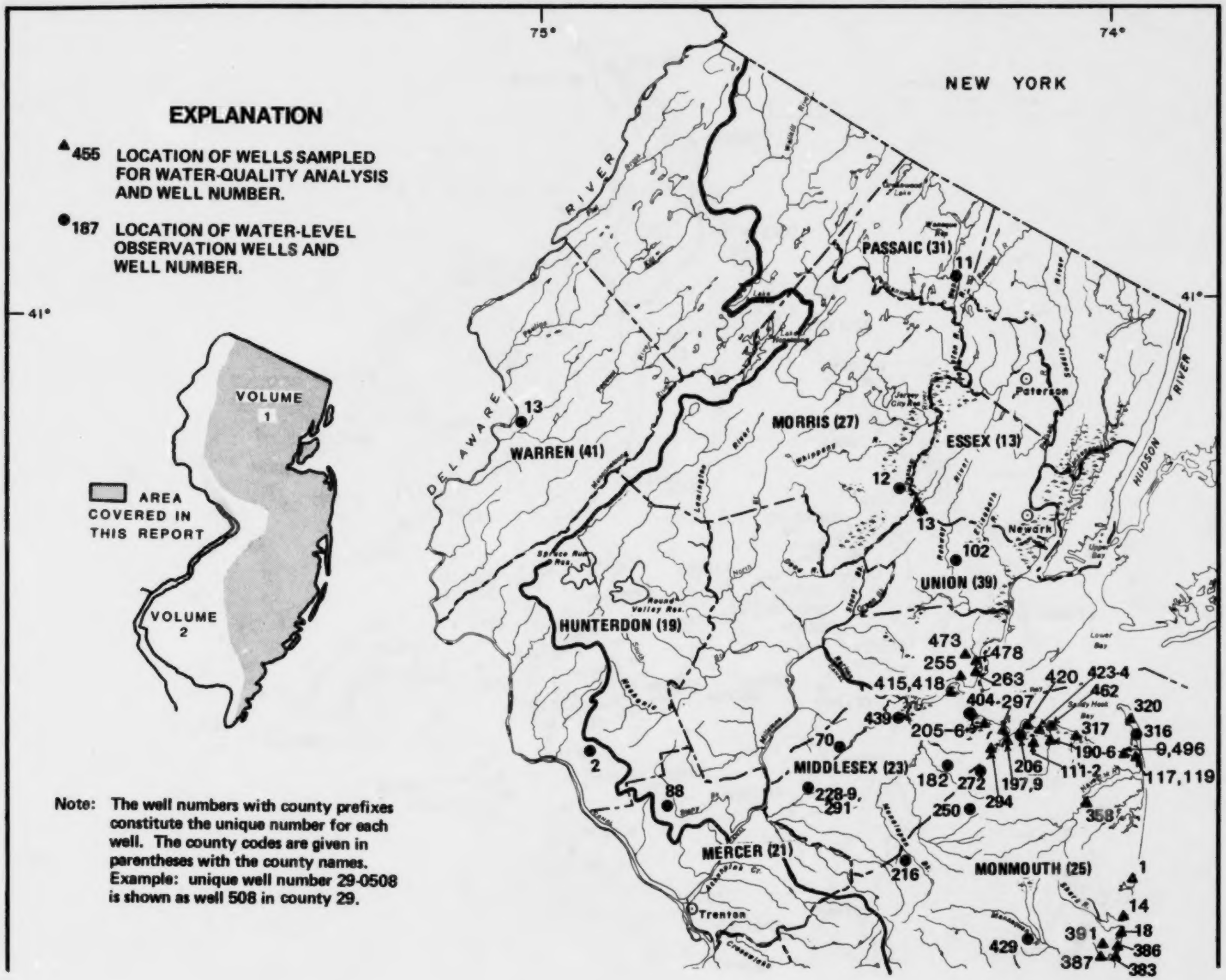


Figure 6.--Location of low-flow and crest-stage partial record stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1980



EXPLANATION

▲455 LOCATION OF WELLS SAMPLED FOR WATER-QUALITY ANALYSIS AND WELL NUMBER.

●187 LOCATION OF WATER-LEVEL OBSERVATION WELLS AND WELL NUMBER.

▨ AREA COVERED IN THIS REPORT

Note: The well numbers with county prefixes constitute the unique number for each well. The county codes are given in parentheses with the county names. Example: unique well number 29-0508 is shown as well 508 in county 29.

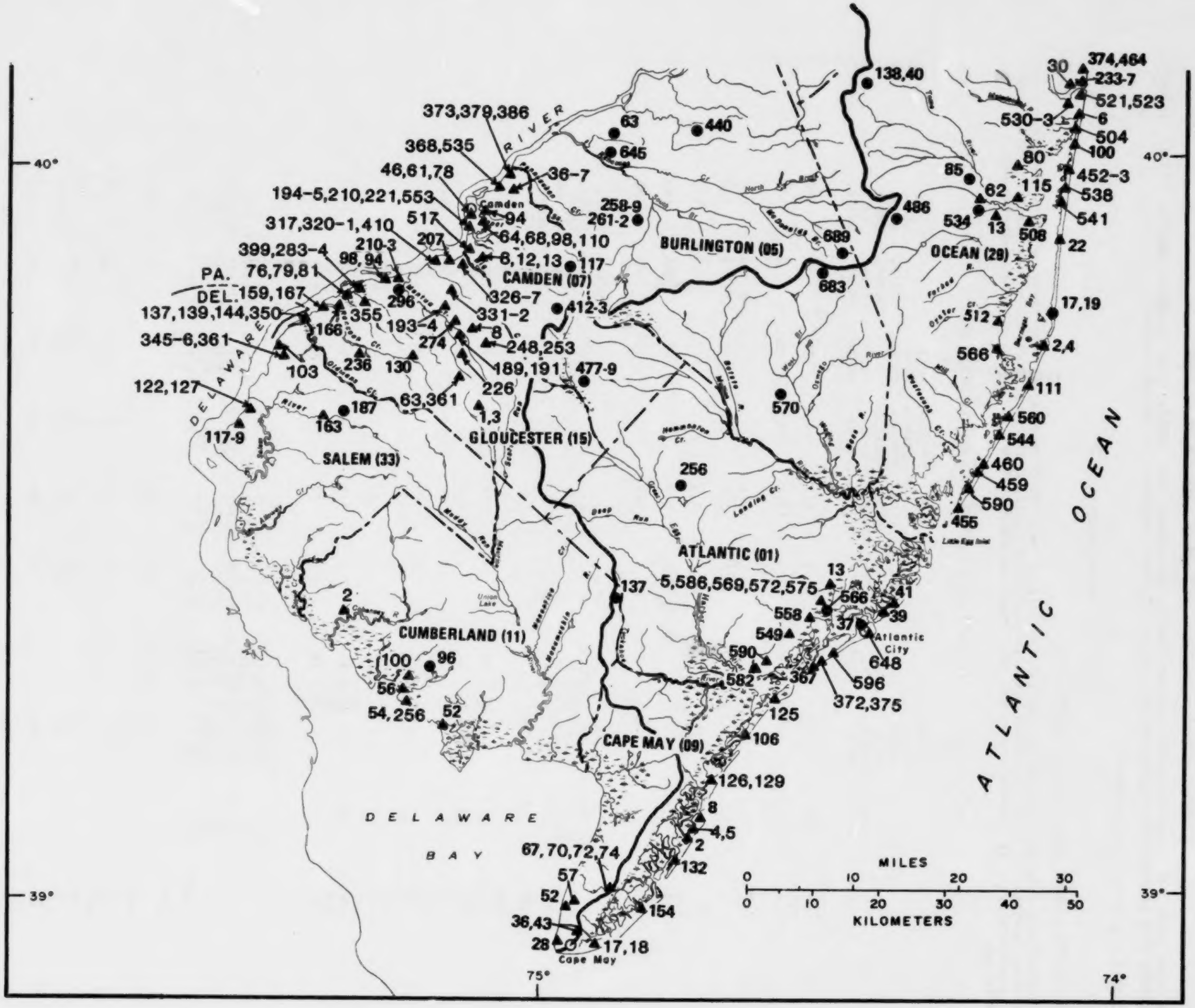


Figure 7.--Map showing location of ground-water quality stations and observation wells.

HUDSON RIVER BASIN

01367620 WALLKILL RIVER AT OUTFLOW OF LAKE MOHAWK AT SPARTA, NJ

LOCATION.--Lat 41°01'59", long 74°37'36", Sussex County, Hydrologic Unit 02020007, at bridge in Sparta, 200 ft (61 m) downstream from outflow of Lake Mohawk, and 1.2 mi (1.9 km) southwest of Sparta Station.

DRAINAGE AREA.--4.38 mi^2 (11.34 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 01...	1330	360	8.2	17.0	8.7	--	790	350	100
MAR 12...	1100	428	8.3	4.0	13.0	E2.3	<20	2	130
13...	0915	--	--	--	--	--	--	--	--
MAY 06...	1200	378	8.2	19.0	11.8	2.2	<20	7	130
19...	1245	372	8.3	20.0	12.8	2.8	<20	<2	130
JUL 01...	0945	352	8.8	23.5	6.3	<1.0	<20	17	110
AUG 04...	1015	342	9.1	28.0	9.2	18	<20	1600	100
SEP 23...	1015	--	8.7	23.5	5.4	E3.3	130	220	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 01...	21	12	24	1.1	74	--	4.5	50	.1
MAR 12...	30	13	29	1.0	100	--	10	55	.1
13...	--	--	--	--	--	--	--	--	--
MAY 06...	29	13	27	1.0	95	--	9.3	50	.1
19...	29	13	28	.8	100	.0	8.9	51	.1
JUL 01...	23	13	27	1.1	87	--	8.0	51	.1
AUG 04...	20	13	30	1.2	110	--	5.3	53	.2
SEP 23...	20	13	28	1.3	71	--	9.1	56	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	.0	183	<1.0	.100	.29	.39	--	.09	7.3
MAR 12...	.1	233	--	--	--	--	--	--	4.5
13...	--	--	.13	.120	1.3	1.4	1.5	--	--
MAY 06...	.1	215	.11	.100	.70	.80	.91	.26	7.1
19...	.0	208	.06	.050	.56	.61	.67	.14	6.1
JUL 01...	.3	204	.05	.110	.46	.57	.62	.03	7.7
AUG 04...	.1	205	<.05	.120	9.9	10	--	1.4	26
SEP 23...	.1	221	.05	.040	1.6	1.6	1.6	.37	9.3

01367620 WALLKILL RIVER AT OUTFLOW OF LAKE MOHAWK AT SPARTA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
MAY 19...	1245	--	--	--	40	29	--	0	30	0	--
SEP 23...	1015	2400	3.8	13	--	--	0	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
MAY 19...	10	--	--	4	--	100	--	2	--	100	--
SEP 23...	--	<10	<10	--	30	--	5200	--	20	--	170

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 19...	<.1	--	2	--	0	--	20	--	2	--	--
SEP 23...	--	.00	--	<10	--	0	--	90	--	0	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	2	.5	.7	1.1	.0	.1	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01367700 WALLKILL RIVER AT FRANKLIN, NJ

LOCATION.--Lat 41°06'43", long 74°35'21", Sussex County, Hydrologic Unit 02020007, at bridge 120 ft (37 m) downstream from dam at outlet of Franklin Pond in Franklin, and 0.8 mi (1.3 km) upstream from Wildcat Brook.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 01...	1130	300	7.4	15.0	7.1	--	330	70	100
MAR 13...	0945	335	7.8	1.0	12.2	E3.0	<20	220	100
MAY 05...	1130	256	8.5	15.0	9.3	2.0	330	920	96
19...	1130	340	8.3	15.0	7.8	1.1	940	14	120
JUL 01...	1045	393	8.3	19.5	5.0	<1.1	5400	>2400	140
AUG 04...	1145	418	7.7	28.5	4.0	3.4	170	33	150
SEP 23...	1130	440	8.8	18.0	6.3	E3.6	20	4	160

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 01...	25	9.7	16	1.2	78	.0	8.8	31	.1
MAR 13...	25	10	19	1.3	76	--	17	34	.1
MAY 05...	23	9.4	17	.8	70	--	16	25	.1
19...	28	12	21	.8	95	--	13	34	.1
JUL 01...	32	15	22	2.0	110	--	18	39	.2
AUG 04...	35	15	24	2.2	130	--	14	42	.2
SEP 23...	36	18	28	3.8	110	--	35	53	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	6.6	171	<1.0	.300	.03	.33	--	.16	4.0
MAR 13...	4.9	174	.63	.120	.99	1.1	1.7	E.09	3.8
MAY 05...	2.8	146	.05	.100	.63	.73	.78	.40	--
19...	3.8	179	.30	.060	.29	.35	.65	.42	4.7
JUL 01...	4.9	232	.65	.160	.68	.84	1.5	.07	9.6
AUG 04...	8.2	255	.65	.190	.71	.90	1.5	.15	4.5
SEP 23...	7.7	298	.80	.030	1.3	1.3	2.1	.18	8.8

01367700 WALLKILL RIVER AT FRANKLIN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
01...	1130	20	4	10	30	1	20	0

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
01...	340	2	70	<.5	1	0	10	2

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

LOCATION.--Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.8 mi (1.3 km) upstream of Papakating Creek, 1.7 mi (2.7 km) southwest of Independence Corner, 2.0 mi (3.2 km) southeast of Sussex, and 2.1 mi (3.4 km) northwest of McAfee.

DRAINAGE AREA.--60.8 mi^2 (157.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
10...	1130	126	365	--	9.0	10.0	<1.0	700	540	130
MAR										
06...	1115	--	499	8.2	2.0	14.1	<.5	<20	14	180
MAY										
05...	1000	160	331	7.9	14.5	8.2	1.6	>24000	>2400	140
19...	1000	78	420	--	15.0	8.1	.9	1300	170	170
JUL										
01...	1215	54	440	8.1	19.0	7.6	<1.0	16000	1600	180
AUG										
04...	1245	36	432	8.1	28.0	7.5	2.4	490	350	180
SEP										
23...	1130	18	505	8.2	23.0	8.2	<1.0	120	240	230

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
10...	32	13	15	1.5	110	.0	15	25	.1
MAR									
06...	40	19	20	1.9	160	--	26	37	.1
MAY									
05...	32	14	16	1.2	110	--	16	22	.1
19...	38	18	17	1.1	140	--	17	28	.1
JUL									
01...	42	19	16	1.8	140	--	32	29	.2
AUG									
04...	41	20	18	2.2	160	--	17	30	.2
SEP									
23...	50	26	23	3.0	190	.0	29	42	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	8.3	197	<1.0	.260	.07	.33	--	.15	3.8
MAR									
06...	4.2	266	--	--	--	--	--	--	5.5
MAY									
05...	3.3	186	.15	.120	.01	.13	.28	.06	--
19...	5.1	222	.42	.100	.54	.64	1.1	.16	4.7
JUL									
01...	7.7	284	.56	.150	.53	.68	1.2	.16	12
AUG									
04...	9.7	265	.78	.170	.49	.66	1.4	.18	7.2
SEP									
23...	8.3	335	1.0	.240	.42	.66	1.7	.31	2.9

HUDSON RIVER BASIN

01367770 WALLKILL RIVER NEAR SUSSEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 10...	1130	--	--	--	70	2	--	0	50	0	--
SEP 23...	1130	2500	2.8	24	30	3	0	0	60	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 10...	20	--	--	3	--	230	--	4	--	40	--
SEP 23...	20	10	<10	4	<10	520	6500	3	<10	110	510

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.2	--	2	--	0	--	20	--	1	--	--
SEP 23...	<.1	.00	9	<10	0	0	40	420	5	82	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	3	1.2	1.4	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01367910 PAPAKATING CREEK AT SUSSEX, NJ

LOCATION.--Lat 41°12'02", long 74°35'59", Sussex County, Hydrologic Unit 02020007, at bridge on State Route 23 in Sussex, 0.7 mi (1.1 km) downstream from Clove Brook, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.

DRAINAGE AREA.--59.4 mi² (153.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
10...	1015	266	215	--	9.0	--	1.0	1700	1600	70
MAR										
06...	1000	44	290	7.4	.5	12.6	<1.0	<20	<2	91
MAY										
05...	0845	120	182	7.7	14.5	8.2	2.4	>24000	>2400	64
19...	1115	52	227	7.1	16.0	4.9	2.1	50	170	86
JUL										
01...	1130	55	230	7.0	20.0	5.9	E2.4	9200	>2400	84
AUG										
04...	0945	33	245	7.7	15.0	1.5	3.5	9200	430	88
SEP										
23...	1015	22	318	7.4	23.5	4.7	E2.4	16000	350	110

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
10...	22	3.6	11	2.1	45	--	21	18	.1
MAR									
06...	29	4.5	13	2.3	58	--	30	24	.1
MAY									
05...	20	3.4	11	1.5	33	--	21	14	.1
19...	27	4.5	12	1.3	52	.0	22	17	.1
JUL									
01...	27	4.1	12	2.4	41	--	31	18	.1
AUG									
04...	28	4.3	11	2.8	66	--	22	18	.1
SEP									
23...	37	5.3	15	4.2	60	.0	39	25	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	7.5	124	<1.0	.210	.63	.84	--	.26	5.0
MAR									
06...	5.3	165	1.5	.460	1.1	1.6	3.1	.24	3.5
MAY									
05...	4.9	100	.43	.300	.43	.73	1.2	.07	--
19...	5.4	138	1.2	.160	.29	.45	1.6	.43	3.4
JUL									
01...	5.8	149	.61	.180	.49	.67	1.3	.19	8.1
AUG									
04...	6.4	157	.45	.130	.69	.82	1.3	.58	8.3
SEP									
23...	7.2	208	.55	.510	1.5	2.0	2.5	1.4	8.5

01367910 PAPAKATING CREEK AT SUSSEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 19...	1115	40	3	0	10	0	10	3
SEP 23...	1015	40	2	0	60	0	10	10

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 19...	830	4	110	.2	1	0	20	2
SEP 23...	1700	14	360	<.1	4	0	20	5

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville.

DRAINAGE AREA.--140 mi^2 (363 km^2).

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.28 ft (115.605 m) National Vertical Geodetic Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft^3/s (17 m^3/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--43 years, 217 ft^3/s (6.145 m^3/s), 21.05 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft^3/s (195 m^3/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft^3/s (0.12 m^3/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft^3/s (34.0 m^3/s):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Mar. 23	1745	1,420	40.2	8.19	2.496

Minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Sept. 13, 14; minimum gage height, 2.89 ft (0.881 m), Sept. 13, 14, 15, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	117	263	194	64	60	764	800	84	155	46	16
2	518	110	230	184	62	56	833	613	94	83	36	16
3	536	274	205	175	60	52	780	434	110	83	69	15
4	471	476	194	150	58	54	700	359	150	74	74	16
5	390	415	188	140	58	61	766	304	118	64	45	16
6	410	315	180	130	56	67	640	268	84	185	34	17
7	375	249	211	122	56	74	541	245	77	134	30	19
8	290	215	222	128	54	97	445	238	83	76	27	17
9	239	200	199	116	54	151	459	230	89	59	24	15
10	271	226	175	102	54	136	674	206	94	51	24	15
11	356	297	165	120	54	192	804	192	97	44	22	14
12	333	302	163	334	52	175	660	214	81	59	30	14
13	304	288	177	317	52	121	540	251	69	65	33	13
14	265	260	243	243	52	82	482	236	61	43	25	13
15	226	238	211	211	50	134	556	196	56	35	23	14
16	206	215	175	206	52	119	555	169	52	34	24	19
17	190	197	222	179	52	117	465	151	49	47	22	25
18	180	185	170	169	54	485	391	138	45	48	22	62
19	168	176	140	193	56	791	343	139	44	39	21	53
20	156	166	137	194	60	640	310	138	43	32	21	29
21	144	163	146	165	62	538	285	139	49	28	26	21
22	137	158	163	147	66	997	263	178	57	27	24	20
23	131	153	165	146	70	1340	237	149	40	47	22	19
24	130	153	207	128	74	1300	217	126	36	87	21	18
25	132	148	328	100	80	1100	203	113	34	50	20	17
26	120	197	437	94	76	960	194	98	33	36	19	17
27	111	458	351	90	72	820	187	86	30	29	19	16
28	116	497	282	86	70	700	311	77	29	26	18	16
29	169	416	247	82	66	600	713	70	31	29	17	15
30	152	321	228	78	---	704	946	65	207	85	17	15
31	130	---	211	72	---	715	---	70	---	72	16	---
TOTAL	7577	7585	6635	4795	1746	13438	15264	6692	2126	1926	871	592
MEAN	244	253	214	155	60.2	433	509	216	70.9	62.1	28.1	19.7
MAX	536	497	437	334	80	1340	946	800	207	185	74	62
MIN	111	110	137	72	50	52	187	65	29	26	16	13
CFSM	1.74	1.81	1.53	1.11	.43	3.09	3.64	1.54	.51	.44	.20	.14
IN.	2.01	2.02	1.76	1.27	.46	3.57	4.06	1.78	.56	.51	.23	.16

CAL YR 1979 TOTAL 112661 MEAN 309 MAX 2730 MIN 31 CFSM 2.21 IN 29.94
WTR YR 1980 TOTAL 69247 MEAN 189 MAX 1340 MIN 13 CFSM 1.35 IN 18.40

01368950 BLACK CREEK NEAR VERNON, NJ

LOCATION.--Lat 41°13'21", long 74°28'33", Sussex County, Hydrologic Unit 02020007, at bridge on Maple grange road, 0.6 mi (1.0 km) upstream of confluence with Wawayanda Creek, 0.7 mi (1.1 km) northwest of Maple Grange, and 1.7 mi (2.7 km) northeast of Vernon.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 01...	1000	28	550	7.3	14.5	6.4	--	790	110	220
MAR 13...	0930	12	520	7.4	.5	9.9	E2.0	130	240	210
APR 24...	1130	39	428	7.6	13.0	9.8	2.7	330	5	200
MAY 19...	0930	20	520	7.4	15.5	5.1	1.3	130	46	220
JUL 01...	0945	14	490	7.4	18.5	4.0	<1.0	3500	>2400	190
AUG 04...	1215	12	525	7.8	19.0	1.4	2.1	220	240	190
SEP 23...	1045	5.2	745	7.3	22.0	4.5	E1.3	490	920	250

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 01...	52	22	22	1.6	190	--	6.4	44	.2
MAR 13...	48	22	26	1.9	180	--	20	51	.2
APR 24...	48	20	20	1.5	170	--	17	40	.2
MAY 19...	52	23	26	.7	200	.0	13	45	.2
JUL 01...	46	19	27	1.7	150	--	29	45	.2
AUG 04...	44	20	28	2.4	170	--	16	51	.3
SEP 23...	56	26	49	3.0	200	.0	23	95	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	9.7	299	<1.0	.200	.25	.45	--	.14	5.9
MAR 13...	6.5	314	1.3	.210	.89	1.1	2.3	.15	3.5
APR 24...	3.4	284	.67	.300	.23	.53	1.2	.22	3.6
MAY 19...	6.8	305	.74	.120	.48	.60	1.3	.24	7.8
JUL 01...	7.3	334	.45	.160	--	--	--	.23	15
AUG 04...	8.3	328	.98	.070	.63	.70	1.7	.37	4.7
SEP 23...	8.8	437	1.5	.100	.60	.70	2.2	.64	6.1

01368950 BLACK CREEK NEAR VERNON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
19...	0930	30	3	0	30	0	10	2
SEP								
23...	1045	30	2	0	40	0	40	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
19...	1000	0	280	.2	1	0	10	4
SEP								
23...	810	2	460	.1	1	0	20	3

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

REMARKS.--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft^3/s (23.8 m^3/s); minimum daily, 2.6 ft^3/s (0.074 m^3/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft^3/s (30.0 m^3/s) Apr. 10, gage height, 9.78 ft (2.981 m), no flow for part of Feb. 8, as a result of construction work above station; minimum gage height, 2.18 ft (0.664 m), Feb. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	45	34	18	19	222	110	17	21	19	60
2	23	14	46	35	18	18	118	78	18	23	21	59
3	28	60	33	32	18	18	92	71	27	23	21	59
4	21	76	21	31	18	17	178	69	23	20	18	59
5	45	30	21	31	17	19	146	38	19	22	18	59
6	65	26	22	25	17	18	83	45	14	29	18	60
7	19	24	35	18	17	18	68	42	18	20	17	59
8	22	23	36	23	14	19	64	110	19	20	17	62
9	21	21	37	23	18	21	258	66	17	20	17	76
10	38	23	35	23	18	23	808	40	18	20	17	76
11	124	31	32	33	17	42	267	38	15	17	17	86
12	49	65	30	124	18	21	147	54	15	17	17	86
13	48	60	43	106	18	20	111	84	14	18	17	85
14	51	59	56	76	19	27	144	58	16	18	17	85
15	59	47	49	63	17	26	185	32	17	17	19	85
16	46	40	43	49	18	24	118	24	17	18	24	84
17	15	31	40	22	18	27	80	19	18	17	25	84
18	16	28	36	27	18	45	70	25	21	17	56	86
19	17	26	36	36	18	42	63	40	19	17	119	72
20	17	23	38	31	18	45	53	76	21	17	86	70
21	17	23	27	20	20	288	52	83	21	16	53	70
22	17	20	26	21	20	842	51	75	20	17	58	68
23	16	20	27	23	22	339	35	37	21	23	65	68
24	17	19	28	21	22	150	37	24	21	16	56	68
25	16	18	95	18	21	205	38	19	23	17	56	68
26	14	99	146	17	20	139	29	20	21	17	56	68
27	14	326	110	17	19	94	34	20	22	17	56	67
28	20	139	78	17	20	70	311	17	21	17	57	66
29	23	71	32	19	17	111	504	17	23	17	61	65
30	23	50	32	19	---	181	145	16	35	17	65	59
31	21	---	33	20	---	178	---	17	---	21	61	---
TOTAL	951	1512	1368	1054	533	3106	4511	1464	591	586	1224	2119
MEAN	30.7	50.4	44.1	34.0	18.4	100	150	47.2	19.7	18.9	39.5	70.6
MAX	124	326	146	124	22	842	808	110	35	29	119	86
MIN	14	14	21	17	14	17	29	16	14	16	17	59

CAL YR 1979 TOTAL 20349 MEAN 55.8 MAX 808 MIN 12
WTR YR 1980 TOTAL 19019 MEAN 52.0 MAX 842 MIN 14

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi^2 (150.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--39 years, 90.5 ft^3/s (2.562 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft^3/s (61.2 m^3/s) revised, Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft^3/s (47.3 m^3/s) Mar. 22, gage height, 5.89 ft (1.795 m); minimum, 26 ft^3/s (0.74 m^3/s) Mar. 3, gage height, 1.65 ft (0.503 m).

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in WSP 2102 and state reports for water years 1968 through 1979.

Water year	Date	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Water year	Date	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
1968	May 29, 1968	1800	51.0	6.23	1.899	1974	Mar. 21, 1974	675	19.1	3.49	1.064
1969	May 9, June 17, 1969	302	8.55	2.71	0.826	1975	Sept. 27, 1975	2160	61.2	7.15	2.179
1970	Apr. 4, 1970	829	23.5	3.86	1.177	1976	Jan. 28, 1976	1070	30.3	4.43	1.350
1971	Sept. 12, 14, 1971	976	27.6	4.21	1.283	1977	Mar. 23, 1977	1400	39.6	5.22	1.591
1972	June 19, 1972	1780	50.4	6.18	1.884	1978	Jan. 26, 1978	1370	38.8	5.17	1.576
1973	Feb. 5, 1973	931	26.4	4.10	1.250	1979	May 25, 1979	1450	41.1	5.34	1.628

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	41	41	50	32	32	484	241	37	126	76	124
2	61	39	41	54	31	32	280	146	44	126	84	99
3	61	61	40	47	31	32	180	113	54	125	78	80
4	39	41	40	45	31	33	287	98	58	123	61	68
5	48	37	39	48	31	32	324	75	40	123	60	64
6	112	36	39	43	31	32	183	66	38	142	60	66
7	39	36	50	36	31	32	120	71	41	122	59	66
8	35	36	41	35	31	33	105	202	44	121	59	65
9	36	36	40	34	31	42	311	145	41	120	58	64
10	55	40	40	35	31	38	1510	81	53	119	58	68
11	44	40	40	44	31	268	1060	65	41	119	58	72
12	38	62	39	258	31	62	451	82	37	118	59	77
13	37	42	64	157	31	45	224	144	36	116	69	81
14	36	46	108	119	31	108	209	126	36	115	95	83
15	36	39	75	102	31	78	295	73	36	114	94	84
16	37	37	65	80	38	58	230	53	35	112	99	84
17	37	36	78	52	42	71	141	51	35	111	106	84
18	37	36	56	43	34	200	115	48	35	111	115	100
19	37	36	52	93	32	95	102	45	35	107	171	97
20	37	36	54	65	32	79	89	96	35	101	166	91
21	37	36	47	46	35	400	84	131	35	100	164	84
22	37	36	39	39	47	1460	79	135	34	99	160	78
23	37	36	45	44	55	1220	66	85	71	106	156	75
24	37	36	53	42	55	546	58	48	128	99	152	73
25	39	36	192	35	52	388	62	44	128	98	148	73
26	39	89	222	35	48	292	61	39	127	96	144	74
27	39	61	135	33	38	184	62	37	126	95	138	73
28	45	42	38	34	34	126	380	36	124	95	134	71
29	44	40	35	33	33	171	1000	35	127	92	137	71
30	42	40	38	34	---	314	603	35	149	79	160	71
31	42	---	44	32	---	335	---	36	---	77	154	---
TOTAL	1378	1265	1930	1847	1041	6838	9155	2682	1860	3407	3332	2360
MEAN	44.5	42.2	62.3	59.6	35.9	221	305	86.5	62.0	110	107	78.7
MAX	112	89	222	258	55	1460	1510	241	149	142	171	124
MIN	35	36	35	32	31	32	58	35	34	77	58	64

CAL YR 1979 TOTAL 35035 MEAN 96.0 MAX 961 MIN 35
WTR YR 1980 TOTAL 37095 MEAN 101 MAX 1510 MIN 31

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1964 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 05...	1240	31	345	7.7	1.0	14.1	2.0	23	4	110
APR 01...	1030	490	282	7.8	7.5	12.0	1.7	130	79	85
JUN 03...	0950	49	295	7.6	19.0	7.2	2.5	490	>2400	88
JUL 15...	1010	116	288	8.0	24.0	6.9	2.5	230	13	91
AUG 14...	1015	94	278	8.2	26.0	7.0	3.2	80	140	94

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 05...	35	6.4	20	1.9	100	0	82	--	26	34
APR 01...	25	5.4	19	1.8	68	0	56	--	16	34
JUN 03...	26	5.5	17	1.5	90	0	66	.2	21	26
JUL 15...	28	5.1	18	1.8	88	0	72	--	16	30
AUG 14...	29	5.3	18	2.0	88	0	72	--	16	32

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 05...	.1	3.1	176	.90	.110	.64	.75	1.6	<.01	7.8
APR 01...	.1	2.2	169	1.1	E.160	--	1.4	2.5	.07	3.6
JUN 03...	.1	3.9	184	.95	.290	.64	.93	1.9	.17	12
JUL 15...	.1	1.6	160	.15	.110	.73	.84	.99	.37	6.5
AUG 14...	.1	1.2	181	.12	.040	1.5	1.5	1.6	.40	5.4

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 03...	0950	0	1	0	80	0	<10	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 03...	530	5	210	.1	5	0	10	0

01377500 PASCACK BROOK AT WESTWOOD, NJ

LOCATION.--Lat 40°59'33", long 74°01'19", Bergen County, Hydrologic Unit 02030103, on right bank 75 ft (23 m) upstream from Harrington Avenue in Westwood, 500 ft (150 m) downstream from Musquapsink Brook, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--29.6 mi^2 (76.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 28.62 ft (8.723 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by Woodcliff Lake 3.0 mi (4.8 km) above station (see Hackensack River Basin, reservoirs in). Water diverted for municipal supply by Spring Valley Water Co., by pumpage from well fields in headwater area of Pascack Brook in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake probably reduces flow past this station.

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--46 years, 55.3 ft^3/s (1.566 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft^3/s (69.1 m^3/s) Sept. 12, 1971, gage height, 7.57 ft (2.307 m); minimum, 5.6 ft^3/s (0.16 m^3/s) June 29, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2030	640	18.1	4.00	1.219	Apr. 10	0545	*683	19.3	4.11	1.253
Oct. 6	0130	559	15.8	3.79	1.155	Apr. 28	1815	*683	19.3	4.11	1.253
Mar. 22	0930	414	11.7	3.38	1.030						

Minimum discharge, 8.9 ft^3/s (0.25 m^3/s) Aug. 28, 29, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	38	40	54	48	47	181	184	65	52	42	11
2	72	41	40	55	52	48	99	120	74	53	60	12
3	86	69	39	55	52	48	90	93	85	52	68	15
4	57	43	39	53	52	48	197	55	68	51	46	12
5	130	39	39	54	51	50	104	55	68	56	45	11
6	278	38	42	53	50	48	73	54	63	73	45	14
7	53	38	52	53	50	48	77	54	76	53	71	11
8	47	37	41	53	49	50	57	83	69	52	93	11
9	46	38	39	52	49	54	306	54	71	52	90	12
10	117	43	39	52	49	57	506	52	71	52	85	11
11	86	45	38	80	49	104	292	51	67	52	81	10
12	48	65	38	88	48	60	276	58	65	46	80	11
13	46	42	53	56	48	58	138	118	64	44	72	11
14	43	46	44	55	48	74	160	84	56	44	59	12
15	43	41	40	56	47	65	117	49	56	48	40	11
16	43	39	39	57	51	62	91	47	55	48	16	12
17	42	39	44	55	48	63	79	48	54	48	14	13
18	41	38	39	57	46	92	56	49	54	47	13	46
19	40	37	38	68	49	59	66	46	53	46	12	42
20	40	37	38	57	50	56	81	46	54	46	12	28
21	40	37	38	56	47	173	52	61	53	42	21	22
22	39	37	37	55	51	323	51	47	52	47	15	20
23	39	36	37	55	66	162	51	45	50	62	14	18
24	38	36	41	54	62	88	50	44	49	50	13	17
25	39	36	84	54	61	172	49	43	47	49	12	16
26	40	118	44	53	62	84	48	42	50	45	11	18
27	39	63	40	53	58	87	77	42	48	45	12	18
28	46	45	39	53	56	72	345	41	48	42	11	15
29	42	42	38	53	53	106	369	41	50	52	11	14
30	39	41	38	53	---	148	275	48	93	49	11	15
31	38	---	41	53	---	190	---	67	---	44	11	---
TOTAL	1894	1344	1298	1755	1502	2796	4413	1921	1828	1542	1186	489
MEAN	61.1	44.8	41.9	56.6	51.8	90.2	147	62.0	60.9	49.7	38.3	16.3
MAX	278	118	84	88	66	323	506	184	93	73	93	46
MIN	38	36	37	52	46	47	48	41	47	42	11	10

CAL YR 1979 TOTAL 26283 MEAN 72.0 MAX 683 MIN 17
WTR YR 1980 TOTAL 21968 MEAN 60.0 MAX 506 MIN 10

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ

LOCATION.--Lat 40°56'52", long 74°01'34", Bergen County, Hydrologic Unit 02030103, on right bank upstream from two masonry dams and two lift gates at pumping plant of Hackensack Water Co., New Milford, 4.0 mi (6.4 km) downstream from Pascack Brook, and 21.8 mi (35.1 km) upstream from mouth.

DRAINAGE AREA.--113 mi^2 (293 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.

REVISED RECORDS: WSP 601: Drainage area. WSP 711: 1927-28(M). WRD-NJ 1970: 1969. WRD-NJ 1977: 1975(M).

GAGE.--Water-stage recorder above south dam. Datum of gage is 6.25 ft (1.905 m) National Geodetic Vertical Datum of 1929. October 1921 to November 23, 1923, nonrecording gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder at same site at datum 0.05 ft (0.015 m) lower.

REMARKS.--Water-discharge records good except those below 1.0 ft^3/s (0.028 m^3/s), which are poor. Records given herein do not include diversion at gage. Flow regulated by De Forest Lake, Lake Tappan, Woodcliff Lake 9.0 mi (14.5 km) upstream from station, and Oradell Reservoir 0.6 mi (1.0 km) upstream from station (see Hackensack River Basin, reservoirs in). Water diverted at gage, De Forest Lake, and West Nyack, NY, for municipal supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--59 years, 105 ft^3/s (2.974 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Nov. 9, 1977, gage height, 7.95 ft (2.423 m) from high-water mark; no flow many days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,920 ft^3/s (82.7 m^3/s) Apr. 10, gage height, 5.34 ft (1.628 m); no flow part or all of many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.89	1.0	2.6	23	.10	550	355	18	.18	.18	.19
2	.47	1.7	1.8	2.4	19	.29	421	175	18	.18	.20	.22
3	.63	1.2	1.3	2.4	18	.44	288	148	20	.22	.23	.17
4	1.4	.91	.71	1.3	17	.13	728	86	21	.21	.27	.18
5	1.1	1.2	.36	1.4	17	.16	498	41	22	.22	.19	.17
6	200	.94	1.2	2.3	18	.15	256	22	20	.20	.20	.23
7	11	.58	.62	1.4	17	.07	133	22	21	.19	.17	.18
8	.60	.96	1.8	1.1	17	.24	67	313	17	.20	.20	.17
9	.55	1.1	1.0	1.2	18	.21	1230	144	17	.19	.17	.20
10	76	.68	.43	.99	17	.66	2660	57	18	.21	.20	.17
11	109	.55	1.0	1.6	19	.84	1390	34	19	.27	.21	.20
12	2.2	.45	2.3	.93	18	.32	843	59	17	.23	.20	.16
13	.45	.56	1.0	11	7.5	.96	509	301	17	.24	.18	.19
14	.39	.64	.48	73	.10	1.1	592	153	18	.21	.18	.20
15	.74	1.0	2.0	65	.08	.18	268	66	19	.21	.19	.23
16	.58	1.4	1.2	52	.06	.11	374	36	19	.21	.19	.19
17	.60	.70	.96	33	.05	.44	127	20	18	.22	.17	.27
18	2.6	1.2	2.6	28	.31	.40	119	15	14	.21	.17	.23
19	54	.45	1.1	61	.24	.22	557	18	15	.22	.18	.21
20	137	.70	1.2	53	.09	.71	388	15	17	.20	.16	.19
21	88	1.0	1.4	29	.03	690	29	18	16	.22	.17	.18
22	.41	1.1	2.0	24	.14	2360	21	52	19	.23	.17	.20
23	.79	1.7	2.2	27	.19	1440	21	46	12	.21	.18	.18
24	.44	.22	.30	27	.14	662	18	28	.19	.29	.22	.17
25	1.4	.94	2.9	27	.13	713	15	19	.45	.25	.18	.20
26	2.0	1.9	2.0	27	.19	310	17	19	1.6	.30	.17	.20
27	.78	.68	1.6	28	.27	217	15	21	.19	.23	.18	.18
28	1.1	2.7	1.7	27	.06	125	892	18	.19	.24	.19	.19
29	1.5	1.0	1.5	23	.42	367	1540	17	.19	.49	.21	.17
30	1.6	1.4	3.1	23	---	574	859	18	.18	.19	.19	.19
31	1.3	---	2.5	20	---	758	---	20	---	.21	.20	---
TOTAL	699.01	30.45	45.26	677.62	228.00	8223.73	15425	2356	414.99	7.08	5.90	5.81
MEAN	22.5	1.02	1.46	21.9	7.86	265	514	76.0	13.8	.23	.19	.19
MAX	200	2.7	3.1	73	23	2360	2660	355	22	.49	.27	.27
MIN	.38	.22	.30	.93	.03	.07	15	15	.18	.18	.16	.16

CAL YR 1979 TOTAL 33432.85 MEAN 91.6 MAX 1910 MIN .18
WTR YR 1980 TOTAL 28118.85 MEAN 76.8 MAX 2660 MIN .03

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi^2 (68.9 km^2). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm^3), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi^2 (127 km^2). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm^3), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi^2 (50.2 km^2). PERIOD OF RECORD, December 1929 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm^3), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi^2 (293 km^2). PERIOD OF RECORD, December 1922 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm^3), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01376700	DE FOREST LAKE †		01376950	LAKE TAPPAN †		01377450	WOODCLIFF LAKE †	
Sept. 30	83.29	5,095	-	48.09	1,495	-	84.88	375	-
Oct. 31	85.03	5,664	+28.4	51.33	2,358	+43.1	86.78	455	+4.0
Nov. 30	85.10	5,687	+1.2	54.72	3,389	+53.2	88.84	550	+4.9
Dec. 31	85.09	5,684	-0.1	55.01	3,484	+4.7	87.82	502	-2.4
CAL YR 1979	-	-	+7.5	-	-	+9.1	-	-	+.9
Jan. 31	84.84	5,601	-4.1	55.00	3,480	-.2	85.74	411	-4.5
Feb. 29	84.45	5,472	-6.9	55.00	3,480	0	81.29	245	-8.9
Mar. 31	85.24	5,734	+13.1	55.08	3,507	+1.3	90.04	608	+18.1
Apr. 30	85.15	5,704	-1.5	55.03	3,490	-.9	92.30	725	+6.0
May 31	84.82	5,594	-5.5	54.86	3,435	-2.7	91.61	688	-1.8
June 30	84.00	5,325	-13.9	53.49	3,000	-22.4	89.06	560	-6.6
July 31	82.46	4,832	-24.6	47.61	1,379	-80.9	84.27	351	-10.4
Aug. 31	78.46	3,628	-60.1	39.20	70	-65.3	67.00	6	-17.2
Sept. 30	72.37	1,995	-84.2	34.00	0	-3.6	67.00	0	-.3
WTR YR 1980	-	-	-13.1	-	-	-6.3	-	-	-1.6
	01378480	ORADELL RESERVOIR †							
Sept. 30	19.93	2,514	-						
Oct. 31	20.25	2,584	+3.5						
Nov. 30	20.60	2,661	+4.0						
Dec. 31	21.92	2,964	+15.1						
CAL YR 1979	-	-	+4.0						
Jan. 31	21.86	2,949	-.7						
Feb. 29	19.11	2,340	-32.5						
Mar. 31	22.93	3,208	+43.3						
Apr. 30	23.13	3,259	+2.6						
May 31	21.84	3,945	+15.7						
June 30	19.43	2,408	-27.7						
July 31	19.26	2,372	-1.8						
Aug. 31	16.86	1,888	-24.2						
Sept. 30	14.66	1,478	-21.1						
WTR YR 1980	-	-	-4.4						

† Elevation at 0800 on first day of following month.

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October	5.36	2.18	138
November	7.04	2.13	141
December	5.88	2.11	137
CAL YR 1979	10.4	2.31	149
January	8.30	2.12	135
February	5.40	2.12	135
March	7.83	2.09	138
April	8.69	2.18	139
May	11.3	2.22	153
June	13.2	2.43	179
July	14.0	2.68	189
August	19.0	2.67	193
September	11.7	2.35	136
WTR YR 1980	9.83	2.27	151

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0	0	3.30	0.27
November	0	0	0	0
December	0	0	.26	0
CAL YR 1979.	0	.28	5.86	.47
January	0	.38	18.0	0
February	0	.78	18.9	0
March	0	1.72	13.7	.29
April	0	0	0	0
May	0	0	1.10	0
June	0	0	20.8	0
July	0	0	14.6	0
August	0	0.52	5.69	.64
September	.01	0.95	4.38	1.57
WTR YR 1980.	0	0.36	8.36	.24

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°40'48", long 74°31'45", Somerset County, Hydrologic Unit 02030103, on right bank 200 ft (60 m) downstream from Davis Bridge, 0.7 mi (1.1 km) northwest of Millington, and 1.8 mi (2.9 km) downstream from Black Brook.

DRAINAGE AREA.--55.4 mi^2 (143.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1903 to June 1906 (published as "at Millington"), October 1921 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1905(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 215.60 ft (65.715 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Nov. 25, 1903 to July 15, 1906, nonrecording gage at bridge 0.8 mi (1.3 km) downstream at different datum. Nov. 10, 1921 to Sept. 1, 1923, nonrecording gage at site 200 ft (60 m) downstream at present datum. Oct. 31, 1923 to July 3, 1925, nonrecording gage and concrete control at present site and datum.

REMARKS.--Water-discharge records good except those after July 11, which are fair. No gage-height record Mar. 18-27. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, was discontinued in April 1979 and the installation dismantled.

AVERAGE DISCHARGE.--60 years (water years 1905, 1921-80) 90.3 ft^3/s (2.557 m^3/s), 22.12 in/yr (562 mm/yr), adjusted for diversion water years 1970-1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Jan. 9, 1905, gage height, 7.8 ft (2.38 m) from graph based on gage readings, site and datum then in use, from rating curve extended above 1,400 ft^3/s (39.6 m^3/s) on basis of velocity-area study; maximum gage height, 9.73 ft (2.966 m) Aug. 29, 1971; minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Sept. 12, 13, 1966, gage height, 3.76 ft (1.146 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 25	Unknown	*740	21.0	Unknown	
Apr. 2	0115	625	17.7	7.05	2.149
Apr. 10	1445	695	19.7	7.24	2.207

Minimum daily discharge, 1.4 ft^3/s (0.040 m^3/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	36	99	63	23	24	572	388	48	28	16	8.7
2	174	36	80	54	22	24	602	283	39	18	20	8.4
3	163	82	64	54	21	22	497	202	39	18	67	8.1
4	143	152	56	39	22	25	437	134	51	20	32	8.6
5	122	122	52	39	22	29	437	92	37	20	23	8.0
6	99	107	52	35	22	32	350	78	34	36	29	8.1
7	79	95	108	32	23	32	273	71	37	28	22	5.8
8	63	79	119	34	22	42	216	115	39	21	19	4.3
9	56	68	98	31	23	113	304	134	35	19	19	3.8
10	100	72	87	27	24	104	663	104	56	17	17	3.8
11	170	90	73	44	24	162	642	85	46	16	16	2.7
12	166	150	63	239	24	149	518	99	35	15	16	1.4
13	162	164	75	258	23	113	362	195	33	14	15	2.2
14	151	140	121	190	24	55	278	171	31	13	15	2.6
15	123	123	105	181	25	80	309	125	29	12	14	3.7
16	103	103	93	158	28	115	275	100	25	11	12	3.7
17	81	86	100	123	30	126	237	87	26	12	11	4.2
18	68	74	77	100	26	350	192	77	22	12	10	21
19	60	65	58	141	26	450	141	73	20	11	12	7.9
20	52	58	49	147	28	430	115	62	20	10	22	5.2
21	47	53	46	121	33	480	104	67	19	9.3	15	4.7
22	43	48	49	98	37	620	92	76	18	10	12	4.7
23	39	46	58	86	48	680	83	62	16	14	12	3.9
24	37	46	94	67	81	640	77	51	15	12	11	3.5
25	36	41	178	52	72	700	72	44	14	9.9	11	3.9
26	34	82	236	46	68	480	73	37	13	8.8	9.9	5.0
27	33	198	185	40	47	347	72	33	13	10	9.7	5.1
28	34	178	147	40	39	279	213	31	13	9.4	10	4.0
29	47	152	118	36	31	253	480	30	13	17	9.6	3.7
30	40	127	94	30	---	310	464	28	45	57	9.5	3.7
31	36	---	77	27	---	359	---	29	---	22	9.2	---
TOTAL	2680	2873	2911	2632	938	7625	9150	3163	881	530.4	525.9	164.4
MEAN	86.5	95.8	93.9	84.9	32.3	246	305	102	29.4	17.1	17.0	5.48
MAX	174	198	236	258	81	700	663	388	56	57	67	21
MIN	33	36	46	27	21	22	72	28	13	8.8	9.2	1.4
CFSM	1.56	1.73	1.70	1.53	.58	4.44	5.51	1.84	.53	.31	.31	.10
IN.	1.80	1.93	1.95	1.77	.63	5.12	6.14	2.12	.59	.36	.35	.11

CAL YR 1979 TOTAL 51303.0 MEAN 141 MAX 1240 MIN 16 CFSM 2.55 IN 34.45
WTR YR 1980 TOTAL 34073.7 MEAN 93.1 MAX 700 MIN 1.4 CFSM 1.68 IN 22.88

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 14...	0920	20	255	7.3	1.0	13.6	.2	2	5	82
MAR 26...	1100	494	122	7.1	5.5	9.8	2.0	23	240	33
JUN 02...	1250	41	182	7.3	22.5	4.5	2.0	490	1600	48
JUL 17...	1210	23	215	7.5	25.5	5.2	2.1	210	920	66
AUG 11...	1045	15	263	7.3	25.0	2.2	1.7	20	16000	85
SEP 24...	1030	3.6	309	7.3	20.0	5.2	1.9	80	240	89

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 14...	20	7.8	15	1.8	71	0	58	--	30	23
MAR 26...	8.1	3.2	8.5	1.5	24	0	20	--	14	11
JUN 02...	11	5.0	11	.9	59	0	48	.2	17	13
JUL 17...	16	6.4	13	1.1	76	0	62	--	11	17
AUG 11...	21	7.8	16	1.4	98	0	80	--	8.8	22
SEP 24...	22	8.3	23	2.6	76	0	62	--	37	32

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	.1	11	143	E.77	.230	.22	.45	--	.21	2.7
MAR 26...	.1	6.8	86	.55	.240	.19	.43	.98	.05	9.8
JUN 02...	.1	12	119	.24	.110	.43	.54	.78	.72	5.1
JUL 17...	.1	15	111	1.0	.220	.54	.76	1.8	.52	5.8
AUG 11...	.1	21	157	.10	.340	.86	1.2	1.3	1.0	13
SEP 24...	.1	18	190	.10	.130	.32	.45	.55	.43	8.8

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
JUN 02...	1250	--	--	--	0	1	--	0	100	2	--
SEP 24...	1030	6400	.0	27	--	--	0	--	--	--	<10

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
JUN											
02...	10	--	--	3	--	1400	--	4	--	150	--
SEP											
24...	--	20	30	--	30	--	20000	--	30	--	190

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
02...	<.1	--	2	--	0	--	10	--	1	--	--
SEP											
24...	--	.00	--	<10	--	0	--	70	--	0	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
SEP											
24...	.0	1	6.8	2.1	.6	.0	.1	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
SEP											
24...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01379500 PASSAIC RIVER NEAR CHATHAM, NJ

LOCATION.--Lat 40°43'31", long 74°23'23", Morris County, Hydrologic Unit 02030103, on left bank 150 ft (46 m) downstream from Stanley Avenue bridge in Chatham, and 3.0 mi (4.8 km) upstream from Canoe Brook.

DRAINAGE AREA.--100 mi^2 (259 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1903 to December 1911, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft (58.982 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1911, nonrecording gage at bridge 150 ft (46 m) upstream at different datum.

REMARKS.--Water-discharge records good. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, was discontinued in April 1979 and the installation dismantled.

AVERAGE DISCHARGE.--51 years (water years 1904-11, 1938-80), 171 ft^3/s (4.842 m^3/s), 23.22 in/yr (590 mm/yr), adjusted for diversion water years 1970-79.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft^3/s (95.7 m^3/s) Aug. 2, 1973, gage height, 9.36 ft (2.853 m) from floodmark; minimum, 2.0 ft^3/s (0.057 m^3/s) many days in May and June 1903, August and October 1905, September and October 1906, and September 11, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 25	0315	*1370	38.7	6.32	1.926
Apr. 1	1800	931	26.4	5.57	1.698
Apr. 9	2400	977	27.7	5.65	1.722

Minimum discharge, 8.2 ft^3/s (0.23 m^3/s) Sept. 14, gage height, 3.05 ft (0.930 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	60	165	121	50	66	842	628	63	94	40	13
2	360	59	135	106	46	46	925	518	75	53	51	15
3	331	160	115	100	41	42	855	405	81	40	54	14
4	269	286	102	88	40	44	824	291	82	37	67	14
5	215	241	95	74	41	50	752	186	78	38	44	14
6	177	180	98	72	41	54	638	139	63	113	33	14
7	140	152	208	70	43	55	507	126	69	82	35	13
8	112	133	206	69	43	68	403	200	72	51	30	13
9	105	115	161	65	43	158	598	227	78	41	25	13
10	200	142	138	60	42	186	932	183	92	37	24	12
11	325	175	125	103	42	407	947	146	94	35	24	11
12	316	327	112	394	44	320	860	169	78	35	33	12
13	292	315	147	393	42	220	741	326	64	32	25	11
14	249	269	231	341	42	146	601	335	58	28	22	9.4
15	203	214	192	287	44	151	539	255	56	27	24	11
16	165	178	155	249	62	177	468	181	52	25	22	10
17	138	149	175	206	83	254	386	145	47	26	20	12
18	116	128	142	175	90	556	324	130	47	26	18	109
19	103	113	109	285	71	594	255	125	43	25	17	54
20	92	104	102	276	49	573	194	115	41	23	19	27
21	82	96	100	215	53	820	168	131	39	22	25	21
22	75	88	97	175	68	1190	148	150	37	24	24	20
23	70	82	106	156	105	1280	131	126	35	45	20	19
24	69	79	160	135	137	1190	120	101	36	28	18	17
25	65	76	334	113	127	1240	112	84	34	26	18	16
26	61	224	378	99	109	1070	106	73	33	23	18	20
27	56	359	338	86	91	881	109	64	32	22	17	17
28	59	323	267	75	75	663	387	59	32	22	17	16
29	68	259	208	70	68	547	661	54	31	37	17	15
30	75	203	169	65	---	537	688	53	141	63	16	15
31	66	---	142	55	---	648	---	52	---	70	15	---
TOTAL	4901	5289	5212	4778	1832	14233	15221	5777	1783	1250	832	577.4
MEAN	158	176	168	154	63.2	459	507	186	59.4	40.3	26.8	19.2
MAX	360	359	378	394	137	1280	947	628	141	113	67	109
MIN	56	59	95	55	40	42	106	52	31	22	15	9.4
CFSM	1.58	1.76	1.68	1.54	.63	4.59	5.07	1.86	.59	.40	.27	.19
IN.	1.82	1.97	1.94	1.78	.68	5.29	5.66	2.15	.66	.46	.31	.21

CAL YR 1979 TOTAL 92426.0 MEAN 253 MAX 1700 MIN 28 CFSM 2.53 IN 34.38
WTR YR 1980 TOTAL 61685.4 MEAN 169 MAX 1280 MIN 9.4 CFSM 1.69 IN 22.95

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1966 to September 1968.
SUSPENDED-SEDIMENT DISCHARGE: July 1963 to September 1968.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 07...	1150	43	495	7.6	1.0	14.0	2.7	130	50	110
MAR 26...	1240	1070	138	7.0	5.5	9.7	1.7	180	170	36
JUN 02...	1030	76	310	7.4	22.5	3.8	6.0	1600	1600	68
JUL 22...	1250	21	575	7.7	29.0	5.9	6.8	790	70	110
AUG 11...	1300	23	840	7.6	27.0	3.9	5.3	1300	>24000	120
SEP 24...	1245	16	760	7.5	21.0	5.1	7.9	1300	700	120

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
FEB 07...	29	9.8	46	2.3	102	0	84	--	40	61
MAR 26...	8.7	3.4	11	1.4	24	0	20	--	16	14
JUN 02...	16	6.8	24	1.7	85	0	70	--	31	27
JUL 22...	28	9.4	65	3.5	112	0	92	--	44	82
AUG 11...	30	12	110	3.7	115	0	94	--	71	150
SEP 24...	31	10	94	4.3	120	0	98	.0	56	120

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	.2	17	280	E1.5	2.300	.33	2.6	--	2.2	5.6
MAR 26...	.1	8.2	100	.84	.140	2.1	2.2	3.0	.23	8.3
JUN 02...	.2	12	197	1.3	.900	1.0	1.9	3.2	1.5	5.2
JUL 22...	.2	16	344	1.9	1.200	1.7	2.9	4.8	2.5	6.8
AUG 11...	.2	18	462	1.6	.700	.90	1.6	3.2	2.0	7.0
SEP 24...	.3	17	416	1.8	.190	2.1	2.3	4.1	3.5	7.7

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
SEP 24...	1245	20	2	0	290	1	10	9

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
SEP								
24...	1700	12	330	.2	13	0	30	12

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°54'06", long 74°24'40", Morris County, Hydrologic Unit 02030103, on right bank at Morris Avenue in Boonton, 1.8 mi (2.9 km) upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi² (300 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1302.

REVISED RECORDS.--WRD-NJ 1974: 1938(m). WDR NJ-78-1: 1949(m), 1952(m), 1968(m), 1971(m), 1973(p), 1974(m), 1977(m).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 364.47 ft (111.090 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records fair. Flow regulated by Splitrock Reservoir 14.5 mi (23.3 km) above station (see Passaic River Basin, reservoirs in). Town of Boonton diverts water for municipal supply from Taylortown Reservoir on Stony Brook, capacity, 75,000,000 gal (283,900 m³) and by pumping from wells in vicinity of Boonton. The mean diversion during the water year from Taylortown Reservoir was 0.14 ft³/s (0.004 m³/s). Rockaway Valley trunk sewer bypasses the station (see station 01381000).

COOPERATION.--Gage-height record collected in cooperation with Jersey City, Bureau of Water.

AVERAGE DISCHARGE.--43 years, 225 ft³/s (6.372 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft³/s (154 m³/s) Jan. 25, 1979, gage height, 7.06 ft (2.152 m); minimum daily, 10 ft³/s (0.28 m³/s) Aug. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft³/s (26.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	2115	965	27.3	3.97	1.210
Jan. 12	0700	1100	31.2	4.16	1.268
Mar. 22	0630	*2670	75.6	5.81	1.771
Apr. 10	0600	2100	59.5	5.32	1.622
Apr. 29	0230	1920	54.4	5.14	1.567

Minimum discharge, 20 ft³/s (0.57 m³/s) Sept. 28-30, gage height, 1.72 ft (0.524 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	158	305	186	113	84	825	745	160	77	40	42
2	380	156	287	189	119	90	766	581	135	60	78	41
3	320	453	263	184	105	80	620	497	196	54	149	41
4	344	450	244	172	107	81	719	423	213	51	67	45
5	293	328	231	165	106	85	760	368	144	56	54	49
6	272	285	226	156	104	92	556	310	117	166	86	59
7	253	266	302	148	102	93	475	285	112	74	56	52
8	231	251	265	147	105	103	423	382	116	56	44	48
9	219	238	230	140	98	130	848	329	121	53	38	46
10	295	262	217	130	97	122	1880	264	156	50	32	45
11	358	280	208	199	95	184	1230	237	127	46	29	44
12	330	354	198	866	95	147	897	293	109	65	29	42
13	307	304	249	409	92	122	705	444	97	46	29	41
14	270	266	286	301	90	134	629	345	90	41	29	42
15	243	237	234	279	91	145	763	263	85	40	41	47
16	223	224	214	260	107	125	626	227	79	71	50	46
17	209	209	234	237	102	142	501	207	72	54	48	45
18	202	192	189	229	103	557	428	202	69	47	47	59
19	197	185	186	284	101	460	364	212	66	43	51	53
20	193	185	180	252	107	309	338	196	68	39	103	34
21	192	177	178	222	115	723	316	216	64	36	64	34
22	184	162	176	206	131	2300	291	212	57	34	59	29
23	163	158	182	203	141	1580	270	176	55	55	57	38
24	169	153	224	191	155	1100	255	162	54	43	52	41
25	161	163	355	172	153	1090	245	153	52	36	49	27
26	146	530	332	165	136	909	234	137	50	36	48	27
27	141	747	256	153	118	674	233	124	49	34	47	24
28	163	482	226	151	111	546	678	113	45	33	45	20
29	192	408	211	144	98	548	1680	106	44	47	43	20
30	173	351	202	131	---	623	1010	102	129	56	43	20
31	164	---	192	125	---	620	---	104	---	45	43	---
TOTAL	7247	8614	7282	6796	3197	13998	19565	8415	2931	1644	1650	1201
MEAN	234	287	235	219	110	452	652	271	97.7	53.0	53.2	40.0
MAX	380	747	355	866	155	2300	1880	745	213	166	149	59
MIN	141	153	176	125	90	80	233	102	44	33	29	20

CAL YR 1979 TOTAL 125014 MEAN 343 MAX 4220 MIN 58
WTR YR 1980 TOTAL 82540 MEAN 226 MAX 2300 MIN 20

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°53'47", long 74°23'36", Morris County, Hydrologic Unit 02030103, on right bank 2,000 ft (610 m) downstream from Boonton Reservoir Dam at Boonton.

DRAINAGE AREA.--119 mi^2 (308 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to December 1903; January, February 1904 (gage height only); January 1906 to September 1950 (monthly discharge only, published in WSP 1302) October 1950 to current year (figures of daily discharge for October 1950 to September 1954 published in Special Report 16 of New Jersey Department of Environmental Protection). Published as "near Boonton" 1903-4, and as "at Boonton" 1906-37.

REVISED RECORDS.--WSP 1902: 1951-54. WDR NJ-79-1: 1949(M), 1952(M), 1968(M), 1970-74(M), 1977(M).

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft (59.643 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Mar. 15, 1903 to Feb. 2, 1904, nonrecording gage at site 1.9 mi (3.1 km) downstream at different datum. Jan. 1, 1906 to Mar. 3, 1918, nonrecording gage on Boonton Dam 2,000 ft (610 m) upstream at datum 305.25 ft (93.040 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Records represent flow in river only. Sewage effluent enters river about 600 ft (183 m) below station (records given herein). Flow regulated by Boonton Reservoir (see Passaic River Basin, reservoirs in) 2,000 ft (610 m) above station, and by Splitrock Reservoir (see Passaic River Basin, reservoirs in) 16.5 mi (26.5 km) above station. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see Passaic River Basin, diversions).

COOPERATION.--Gage-height records for station and records of sewage effluent furnished by Jersey City, Bureau of Water.

AVERAGE DISCHARGE.--74 years (water years 1907-80), 137 ft^3/s (3.880 m^3/s), adjusted for sewage effluent since October 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,560 ft^3/s (214 m^3/s), Oct. 10, 1903; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft^3/s (66.6 m^3/s) Mar. 22, gage height, 6.40 ft (1.951 m); minimum, 3.3 ft^3/s (0.094 m^3/s) June 18, gage height, 1.36 ft (0.415 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	75	261	102	17	9.3	704	675	48	14	12	13
2	329	76	225	98	15	8.6	704	509	55	14	12	13
3	325	207	196	93	13	8.4	581	422	83	14	12	12
4	298	391	176	84	11	8.4	625	377	141	13	12	13
5	263	299	153	78	11	8.6	723	331	83	15	13	13
6	208	230	147	70	11	8.8	552	279	44	14	12	13
7	175	194	203	58	11	9.2	447	234	26	14	12	13
8	149	176	200	54	11	9.9	396	287	23	14	13	13
9	127	157	165	52	11	9.9	582	298	23	14	13	13
10	164	164	135	42	11	9.7	1690	231	39	13	13	12
11	240	187	122	68	10	11	1240	183	38	13	13	12
12	260	259	111	510	11	22	858	204	22	13	13	12
13	246	259	137	406	10	20	648	336	14	13	12	12
14	207	210	205	269	10	41	551	323	13	13	12	12
15	174	172	176	212	10	42	631	231	14	13	12	11
16	173	119	142	188	10	32	562	169	14	13	12	11
17	201	114	148	156	10	36	444	140	14	13	12	10
18	158	99	113	145	9.6	267	384	132	14	13	12	10
19	117	92	101	183	9.3	354	325	140	14	13	12	10
20	104	90	81	184	9.3	284	293	128	14	13	12	9.9
21	102	91	91	149	9.6	394	265	127	14	12	12	10
22	96	82	87	124	9.6	2020	234	147	14	13	12	10
23	88	75	85	112	10	1660	213	113	14	12	12	9.7
24	78	72	113	103	10	1110	193	88	14	12	12	9.2
25	77	68	227	79	31	973	177	72	14	12	11	8.4
26	69	184	296	75	42	875	167	59	13	12	12	8.5
27	45	594	212	58	32	642	162	41	14	12	13	9.0
28	53	491	161	55	24	500	353	28	14	12	13	8.9
29	85	377	132	48	14	474	1440	19	14	12	13	9.0
30	98	319	119	38	---	536	998	15	14	12	13	9.1
31	87	---	109	25	---	541	---	17	---	12	13	---
TOTAL	4916	5923	4829	3918	403.4	10924.8	17142	6355	875	402	382	329.7
MEAN	159	197	156	126	13.9	352	571	205	29.2	13.0	12.3	11.0
MAX	329	594	296	510	42	2020	1690	675	141	15	13	13
MIN	45	68	81	25	9.3	8.4	162	15	13	12	11	8.4
(†)	11.8	11.8	11.8	11.6	11.3	13.7	18.0	14.3	12.3	10.3	10.1	9.7

CAL YR 1979 TOTAL 84654.0 MEAN 232 MAX 3460 MIN 12 † 13.3
WTR YR 1980 TOTAL 56399.9 MEAN 154 MAX 2020 MIN 8.4 † 12.2

† Sewage effluent, in cubic feet per second.

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'29", long 74°20'53", Morris County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at intersection with New Road in Pine Brook, and 1.1 mi (1.8 km) upstream of mouth.

DRAINAGE AREA.--136 mi^2 (352 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 17...	1015	227	193	7.1	13.0	8.5	5.1	110	20	62
FEB 26...	1315	75	318	7.6	4.0	11.2	2.8	20	80	89
APR 02...	1045	932	164	7.3	6.0	11.7	1.4	260	110	41
MAY 29...	1000	54	330	7.5	17.5	6.0	4.4	220	94	94
JUL 16...	1005	59	380	7.5	23.0	4.1	9.9	1700	2700	100
AUG 07...	1000	43	365	7.5	24.0	2.7	7.0	--	--	120
SEP 17...	0945	41	407	7.5	19.0	4.1	7.1	1300	2400	120

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 17...	16	5.4	12	1.6	56	0	46	.0	16	19
FEB 26...	23	7.6	21	2.8	81	0	66	--	23	34
APR 02...	10	3.8	13	1.1	34	0	28	--	15	21
MAY 29...	24	8.3	25	2.9	81	0	66	.0	25	36
JUL 16...	27	9.1	25	4.5	98	0	80	--	28	38
AUG 07...	30	9.9	26	4.2	102	0	84	--	27	38
SEP 17...	30	11	29	4.5	110	0	90	.0	29	43

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	.1	9.4	121	<1.0	.400	.59	.99	--	.70	5.7
FEB 26...	.2	10	171	E1.4	1.810	.41	2.2	--	1.9	4.9
APR 02...	.1	7.0	106	.60	.130	.47	.60	1.2	.07	2.6
MAY 29...	.2	12	202	.25	.440	1.2	1.6	1.8	1.6	4.6
JUL 16...	.2	11	225	2.1	1.200	1.4	2.6	4.7	2.6	5.9
AUG 07...	.3	14	224	2.5	.310	1.4	1.7	4.2	2.0	6.0
SEP 17...	.2	14	260	2.7	1.400	1.2	2.6	5.3	3.7	4.9

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 17...	1015	2700	.1	13	40	1	0	0	60	0	<10
MAY 29...	1000	--	--	--	10	2	--	0	110	0	--
SEP 17...	0945	--	--	--	30	1	--	0	170	2	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 17...	20	<10	<10	11	20	720	7900	9	10	70	120
MAY 29...	<10	--	--	7	--	620	--	4	--	120	--
SEP 17...	10	--	--	10	--	810	--	5	--	160	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 17...	.2	.00	2	10	0	0	[illegible]	60	2	64	.0
MAY 29...	.1	--	5	--	0	--	20	--	1	--	--
SEP 17...	.2	--	5	--	0	--	50	--	0	--	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 17...	.0	23	10	1.8	3.1	3.2	.0	.0	.0	.0	.0
MAY 29...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	--	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 17...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 29...	--	--	--	--	--	--	--	--	--	--
SEP 17...	--	--	--	--	--	--	--	--	--	--

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ

LOCATION.--Lat 40°48'21", long 74°27'22", Morris County, Hydrologic Unit 02030103, on left bank at Morristown sewage-disposal plant, 0.8 mi (1.3 km) downstream from Morristown, and 9.0 mi (14.5 km) upstream from mouth.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1925-27(M) 1928-29, 1930-32(M), 1933-34. WRD-NJ 1974: 1965.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since July 1, 1936. Datum of gage is 260.01 ft (79.251 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to July 16, 1930, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those prior to July 25, which are poor. Flow occasionally regulated by operation of gates in Pocahontas Dam, 2.5 mi (4.0 km) above station.

AVERAGE DISCHARGE.--59 years, 52.3 ft^3/s (1.481 m^3/s) 24.16 in/yr (614 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft^3/s (64.6 m^3/s) Aug. 28, 1971, gage height, 7.60 ft (2.316 m); minimum, 2.8 ft^3/s (0.08 m^3/s) Aug. 27, 1932, gage height, 0.73 ft (0.223 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 12	Unknown	600	17.0	Unknown	
Mar. 22	Unknown	*1100	31.2	a5.47	1.667
Apr. 10	0100	967	27.4	a5.16	1.573
Apr. 28	Unknown	875	24.8	a4.94	1.506
Aug. 5	1630	963	27.3	a5.15	1.570

a - from crest-stage gage

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 12, 13, 26, 27, 28, gage height, 1.76 ft (0.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	37	49	46	33	25	275	128	87	29	21	14
2	134	37	48	46	35	27	191	111	58	25	32	15
3	88	161	45	45	34	26	149	101	107	26	33	16
4	83	100	45	42	33	27	242	93	80	25	21	15
5	70	53	45	43	33	31	179	87	44	41	67	15
6	65	48	53	41	32	29	133	83	38	150	37	15
7	59	45	107	40	33	29	120	84	52	33	22	15
8	57	43	59	41	33	40	112	140	44	26	20	14
9	62	42	48	39	32	53	409	89	53	25	19	14
10	125	58	46	37	32	37	468	76	66	24	17	14
11	112	65	43	112	32	78	205	71	45	23	18	14
12	77	122	42	427	32	39	172	122	38	32	23	14
13	74	64	79	84	31	34	153	228	35	22	18	13
14	56	54	78	66	30	40	171	110	33	21	17	14
15	52	48	51	65	31	42	216	75	33	21	18	15
16	50	46	49	59	41	38	139	70	32	38	18	15
17	48	44	62	56	34	59	114	67	30	27	16	16
18	48	42	44	61	30	279	106	70	30	22	16	31
19	46	42	42	93	32	104	98	71	29	21	24	17
20	44	43	43	62	35	64	94	67	30	19	38	15
21	43	42	42	54	42	430	88	83	27	19	20	15
22	43	41	44	51	44	640	83	69	26	22	18	15
23	41	40	49	54	55	182	80	59	26	40	17	14
24	46	40	64	50	55	139	72	54	26	23	16	13
25	41	39	157	44	43	236	70	51	25	19	16	14
26	38	133	93	43	37	148	68	46	25	19	16	15
27	36	169	61	41	33	114	78	44	25	18	15	13
28	52	68	55	42	32	101	427	43	23	18	15	13
29	52	59	52	40	28	153	360	43	25	55	15	14
30	41	52	51	37	---	167	162	41	77	39	15	14
31	38	---	48	35	---	202	---	54	---	21	15	---
TOTAL	1907	1877	1794	1996	1027	3613	5234	2530	1269	943	673	451
MEAN	61.5	62.6	57.9	64.4	35.4	117	174	81.6	42.3	30.4	21.7	15.0
MAX	134	169	157	427	55	640	468	228	107	150	67	31
MIN	36	37	42	35	28	25	68	41	23	18	15	13
CFSM	2.09	2.13	1.97	2.19	1.20	3.98	5.92	2.78	1.44	1.03	.74	.51
IN.	2.41	2.37	2.27	2.53	1.30	4.57	6.62	3.20	1.61	1.19	.85	.57

CAL YR 1979 TOTAL 33190 MEAN 90.9 MAX 1130 MIN 24 CFSM 3.09 IN 41.99
WTR YR 1980 TOTAL 23314 MEAN 63.7 MAX 640 MIN 13 CFSM 2.17 IN 29.50

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1926, 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 16...	1300	51	240	7.2	11.5	11.4	--	410	170	78
FEB 14...	1155	26	285	8.3	4.0	17.0	.9	490	49	84
APR 02...	1310	181	200	7.5	7.0	12.5	1.3	>2400	1600	47
MAY 22...	1250	68	221	8.1	18.0	11.2	2.3	7900	490	64
JUL 16...	1300	44	314	8.2	26.5	9.8	4.0	11000	3300	90
AUG 18...	1045	16	342	8.5	21.5	12.4	2.3	1700	200	110
SEP 23...	1000	14	380	7.8	22.0	9.5	1.9	2400	3500	120

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 16...	20	6.9	16	1.6	62	0	51	.0	21	25
FEB 14...	21	7.7	20	1.8	68	0	56	--	25	32
APR 02...	12	4.1	16	1.3	37	0	30	--	16	28
MAY 22...	16	5.9	14	1.3	56	0	46	.2	18	22
JUL 16...	23	8.0	20	2.5	80	0	66	--	21	33
AUG 18...	29	8.0	22	2.6	90	1	75	--	26	35
SEP 23...	29	11	27	3.0	102	0	84	.0	28	42

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	.1	17	147	1.4	.600	.24	.84	2.2	1.4	3.4
FEB 14...	.1	18	157	--	.350	.31	.66	--	1.3	2.3
APR 02...	.1	12	130	1.2	.070	.31	.38	1.6	.24	4.0
MAY 22...	.1	16	140	1.3	.260	.59	.85	2.1	1.0	.4
JUL 16...	.1	14	197	1.5	.240	.96	1.2	2.7	1.3	5.4
AUG 18...	.1	17	232	1.8	.040	.79	.83	2.6	.64	1.3
SEP 23...	.1	16	238	2.2	.080	.55	.63	2.8	2.0	7.3

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 16...	1300	800	.4	4.7	20	1	0	0	40	0	<10
MAY 22...	1250	--	--	--	10	1	--	0	60	0	--
SEP 23...	1000	320	.6	9.2	30	1	0	0	90	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 16...	20	<10	<10	6	20	480	9300	2	60	60	260
MAY 22...	10	--	--	6	--	730	--	4	--	70	--
SEP 23...	20	20	<0	5	20	540	16000	5	130	80	260

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 16...	.2	.00	0	<10	0	0	10	70	3	--	--
MAY 22...	.1	--	2	--	0	--	0	--	0	--	--
SEP 23...	.2	.00	3	<10	0	0	20	100	5	7	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 22...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	7	9.0	8.0	220	.0	.3	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 22...	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

LOCATION.--Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, at bridge on New Road, 0.3 mi (0.5 km) southwest of overpass of Interstate 280, 2,000 ft (610 m) upstream of Rockaway River, and 1.4 mi (2.3 km) southwest of Pine Brook.

DRAINAGE AREA.--68.5 mi² (177.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 03...	1220	336	258	7.2	18.5	4.6	3.0	3500	3500	78
FEB 04...	1345	45	490	8.1	1.0	10.7	7.5	3300	17000	120
MAR 17...	1315	88	485	7.2	4.5	10.8	5.7	13000	790	110
MAY 29...	1145	60	455	7.7	20.5	3.6	>8.3	>24000	700	130
JUL 16...	1125	63	415	7.6	25.5	4.4	10	17000	2300	120
AUG 07...	1130	56	339	7.4	25.0	4.2	5.7	--	--	120
SEP 17...	1200	34	495	7.7	18.5	5.7	7.8	3300	700	160

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 03...	21	6.1	16	2.5	76	0	62	.0	25	20
FEB 04...	30	10	44	2.4	134	0	110	--	61	37
MAR 17...	28	8.9	47	2.2	98	0	80	--	29	77
MAY 29...	34	10	50	2.5	149	0	122	.1	51	38
JUL 16...	30	11	28	2.8	124	0	102	--	45	33
AUG 07...	31	9.5	19	2.4	100	0	82	--	36	28
SEP 17...	39	15	30	3.9	144	0	118	.0	43	41

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	.1	13	161	1.4	.480	.00	.48	1.9	.83	9.8
FEB 04...	.1	19	282	E2.6	3.800	.20	4.1	--	2.3	--
MAR 17...	.1	11	273	1.0	1.200	.60	1.8	2.8	1.2	8.4
MAY 29...	.2	16	286	1.9	1.300	1.9	3.2	5.1	1.8	6.3
JUL 16...	.1	13	252	1.2	1.100	1.9	3.0	4.2	2.5	7.9
AUG 07...	.2	16	217	1.1	.490	1.3	1.8	2.9	1.5	9.4
SEP 17...	.1	17	312	2.0	1.900	1.4	3.3	5.3	3.3	7.5

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 03...	1220	10900	.1	32	20	1	0	10	90	0	<10
MAY 29...	1145	--	--	--	20	3	--	0	220	1	--
SEP 17...	1200	1400	.0	23	30	1	0	0	160	1	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 03...	20	30	20	8	70	1500	13000	12	120	90	200
MAY 29...	<10	--	--	18	--	2000	--	19	--	220	--
SEP 17...	20	40	<1	24	<10	1100	1200	9	30	130	85

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	<.5	.00	3	20	0	0	20	180	1	220	.0
MAY 29...	.1	--	7	--	0	--	30	--	0	--	--
SEP 17...	.5	.00	6	<10	1	0	80	60	0	24	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	.0	58	19	5.4	3.7	.0	2.4	.0	.0	.0	.0
MAY 29...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	5	2.5	.3	.0	.0	.3	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	.5	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 29...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01381900 PASSAIC RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'45", long 74°19'18", Morris County, Hydrologic Unit 02030103, on downstream left wingwall of bridge on U.S. Route 46, 0.5 mi (0.8 km) east of Pine Brook, and 1.3 mi (2.1 km) downstream from Rockaway River.

DRAINAGE AREA.--349 mi² (904 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1963-69, 1973, and annual maximum, water years 1966-75, 1978-79. October 1979 to September 1980. Feb. 19 to Aug. 24, 1939 in files of U.S. Army Corps of Engineers, New York District.

REVISED RECORDS.--WDR NJ-77-1: 1967(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 149.26 ft (45.494 m) National Geodetic Vertical Datum of 1929. December 1965 to September 1979, crest-stage gage at same site at datum 10.00 ft (3.048 m) higher. Feb. 19 to Aug. 24, 1939, water-stage recorder at present NJ Route 506 bridge, 1,600 ft (488 m) upstream from gage, operated by U.S. Army Corps of Engineers, New York District to datum 13.05 ft (3.978 m) higher.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, Oct. 1 to Dec. 4, and Apr. 16 to May 7, and winter months, which are fair. Flow regulated by Boonton and Splitrock Reservoirs (see Passaic River Basin, reservoirs in) and many small lakes. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see Passaic River Basin, diversions).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) Sept. 12, 1971, gage height, 21.84 ft (6.657 m) present datum; minimum observed, 70 ft³/s (1.98 m³/s) Sept. 29, 1980, gage height, 10.15 ft (3.094 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1810, according to State Geologist in 1904, 23.2 ft (7.07 m) Oct. 10, 1903, present datum, from King Survey of highwater marks at present NJ Route 506 bridge, 1,600 ft (488 m) upstream from gage. Floods of Mar. 13, 1936 and Sept. 24, 1938 reached stages of 20.8 ft (6.34 m) and 19.4 ft (5.91 m) respectively, at present NJ Route 506 bridge and present datum. Flood of July 23, 1945 reached a stage of 22.3 ft (6.80 m) at present site and datum according to U.S. Army Corps of Engineers; minimum observed, 41.1 ft³/s (1.16 m³/s) Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	1700	*4130	117	19.87	6.056	Apr. 11	1815	3700	105	19.53	5.953
Apr. 2	1230	2590	73.3	18.53	5.648						

Minimum discharge, 70 ft³/s (1.98 m³/s) Sept. 29, gage height, 10.15 ft (3.094 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	250	900	470	220	220	2460	2100	312	313	165	88
2	800	230	750	410	210	200	2580	1800	312	209	157	89
3	1050	500	600	363	200	180	2500	1550	365	167	265	101
4	980	800	470	343	195	170	2470	1300	519	152	183	100
5	800	850	426	318	190	178	2520	1150	415	140	176	94
6	700	760	411	296	190	186	2400	950	294	322	293	92
7	580	650	578	277	185	178	2140	858	274	326	186	87
8	480	540	626	268	185	191	1860	831	271	217	143	79
9	400	480	537	261	180	314	1830	851	247	169	128	80
10	500	450	443	238	180	324	2760	785	348	150	115	82
11	750	490	409	264	180	552	3580	672	315	142	111	81
12	950	660	405	810	176	597	3530	606	264	150	127	82
13	880	740	450	1170	173	488	3070	789	223	140	127	80
14	780	700	629	1240	168	375	2610	971	196	126	114	75
15	700	610	609	1110	169	408	2380	987	181	124	110	75
16	620	540	521	919	165	399	2260	826	174	163	111	77
17	530	450	523	734	165	420	2000	646	173	165	102	78
18	470	400	474	588	165	879	1700	508	165	140	96	189
19	410	370	406	650	170	1300	1500	463	161	125	100	163
20	370	340	356	683	192	1480	1300	438	160	119	134	101
21	350	330	357	615	203	1700	1150	435	158	114	124	92
22	330	310	366	514	225	2980	1000	494	148	118	114	90
23	290	290	369	462	266	4010	870	452	143	210	109	91
24	290	280	414	431	352	3990	750	385	143	178	100	86
25	280	270	1000	379	332	3800	660	331	145	128	94	81
26	260	500	1200	337	322	3580	620	289	139	114	97	86
27	230	1200	1050	303	285	3190	600	256	132	115	98	86
28	230	1400	900	290	251	2710	900	233	125	107	97	77
29	280	1200	750	276	232	2350	1500	212	123	142	98	72
30	290	1000	650	250	---	2230	2200	197	355	231	95	75
31	270	---	540	230	---	2210	---	196	---	189	91	---
TOTAL	16450	17590	18119	15499	6126	41789	57700	22561	6980	5205	4060	2729
MEAN	531	586	584	500	211	1348	1923	728	233	168	131	91.0
MAX	1050	1400	1200	1240	352	4010	3580	2100	519	326	293	189
MIN	230	230	356	230	165	170	600	196	123	107	91	72

WTR YR 1980 TOTAL 214808 MEAN 587 MAX 4010 MIN 72

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'40", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, 50 ft (15 m) upstream from Pompton River.

DRAINAGE AREA.--361 mi^2 (935 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURES: October 1962 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 15...	1315	248	6.9	10.5	8.2	4.2	--	--	73	19
FEB 04...	1050	570	7.6	.5	10.6	5.2	540	1600	130	34
APR 10...	1010	147	7.2	11.0	9.3	1.9	540	350	37	9.8
MAY 22...	1035	380	7.4	17.5	3.9	7.5	490	540	93	24
JUL 17...	1010	575	7.5	25.0	2.1	6.8	<200	110	130	34
AUG 13...	1230	575	7.6	26.0	3.5	6.5	80	50	140	35
SEP 22...	1000	465	7.4	21.5	2.4	5.2	4900	17	110	29

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 15...	6.2	19	2.2	66	0	54	.0	25	25	.1
FEB 04...	12	44	3.6	129	0	106	--	47	59	.2
APR 10...	3.1	10	1.1	32	0	26	--	14	15	.1
MAY 22...	8.1	34	2.2	93	0	76	.0	33	41	.1
JUL 17...	12	53	4.5	132	0	108	--	47	66	.2
AUG 13...	12	54	4.6	129	0	106	--	52	67	.2
SEP 22...	9.7	38	4.8	115	0	94	.0	40	50	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 15...	13	156	E.94	E1.100	--	E1.9	--	E1.0	7.6
FEB 04...	18	299	E2.5	E2.800	--	E4.0	--	3.4	--
APR 10...	4.6	94	.44	.120	--	E.72	--	.26	4.6
MAY 22...	12	225	1.4	1.200	1.4	2.6	4.0	1.7	4.7
JUL 17...	16	314	2.5	2.600	1.5	4.1	6.6	2.8	5.8
AUG 13...	18	341	2.7	1.600	2.0	3.6	6.3	3.0	7.6
SEP 22...	14	287	1.6	2.200	2.4	4.6	6.2	3.0	8.1

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 15...	1315	--	--	--	10	1	0	0	100	0	<10
MAY 22...	1035	--	--	--	0	1	--	0	170	0	--
SEP 22...	1000	20	.0	3.0	20	2	0	0	200	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 15...	10	10	--	11	20	1100	9700	4	20	80	180
MAY 22...	20	--	--	12	--	2400	--	19	--	230	--
SEP 22...	10	<10	<10	7	<10	1100	3200	7	20	90	15

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.2	.00	6	--	0	0	20	90	8	75	.0
MAY 22...	.2	--	8	--	0	--	20	--	12	--	--
SEP 22...	.2	.00	5	<10	0	0	20	20	6	29	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.0	38	33	6.5	.0	.0	4.2	.0	.0	.0	.0
MAY 22...	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	.0	19	.0	.0	1.2	.0	.3	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 22...	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'00", long 74°23'47", Morris County, Hydrologic Unit 02030103, on left bank at Macopin intake dam of Newark water-works, 0.4 mi (0.6 km) downstream from Macopin River, and 3.0 mi (4.8 km) northwest of Butler.
DRAINAGE AREA.--63.7 mi² (165.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1898 to current year. Monthly discharge only for some periods, published in WSP 1302. Records for January 1892 to December 1897, published in WSP 541, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder above dam. Datum of gage is 570.00 ft (173.736 m) National Geodetic Vertical Datum of 1929 (levels by New Jersey Geological Survey). Prior to May 22, 1970, at datum 13.55 ft (4.130 m) higher.

REMARKS.--Water-discharge records fair except those below 50 ft³/s (1.42 m³/s), which are poor. Records given herein represent flow over intake dam only. Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg Reservoirs, and Echo Lake (see Passaic River Basin, reservoirs in). Water diverted above intake dam for municipal supply of city of Newark (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with the Department of Public Affairs, Division of Water Supply, city of Newark. Prior to May 22, 1970, discharge figures furnished by city of Newark.

AVERAGE DISCHARGE.--82 years, 51.4 ft³/s (1.456 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 6,100 ft³/s (173 m³/s) Oct. 10, 1903, gage height, 17.4 ft (5.30 m) present datum; no flow over dam during several months of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) Apr. 10, gage height, 14.92 ft (4.548 m); no flow part or all of some days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	1.5	9.5	6.0	3.1	2.7	422	382	2.5	1.3	1.3	.57
2	17	1.3	8.4	5.3	3.0	2.3	381	257	4.6	1.3	4.7	.57
3	18	48	8.0	4.7	2.9	2.1	310	194	7.1	1.3	13	1.3
4	12	22	11	4.6	2.9	2.4	402	136	6.0	1.3	15	2.1
5	11	16	11	4.1	2.8	3.1	393	82	3.2	1.8	15	1.3
6	9.3	16	11	3.9	2.8	2.8	280	55	2.5	3.9	4.6	1.3
7	7.4	16	11	3.8	2.7	3.4	227	39	2.9	1.3	6.3	.57
8	4.8	13	11	3.6	2.7	4.2	195	41	3.6	.48	8.3	.46
9	5.1	13	11	3.5	2.6	5.0	603	32	4.1	.38	8.3	.57
10	7.7	20	6.6	47	2.5	4.3	973	25	4.2	.50	6.3	.70
11	11	20	6.2	11	2.5	6.5	671	19	2.9	.37	8.3	.58
12	9.7	27	5.7	8.3	2.4	3.6	457	23	2.1	.08	11	1.2
13	16	18	11	8.5	2.4	3.5	348	42	2.1	.02	6.3	1.3
14	14	8.1	8.8	8.0	2.4	3.2	335	85	1.8	.03	4.6	1.7
15	13	.17	6.3	6.9	2.4	3.0	403	52	1.7	.03	8.3	1.6
16	13	.00	6.3	6.3	2.5	3.3	315	18	1.7	.05	11	1.3
17	14	.00	4.3	10	2.7	5.7	216	15	1.4	.01	.57	1.6
18	13	.00	4.7	8.0	2.7	42	159	13	1.3	.01	1.3	1.4
19	14	.00	4.6	6.4	2.6	13	124	13	1.3	.00	1.3	.90
20	15	.00	4.7	6.3	2.7	10	98	13	.97	.05	3.2	.57
21	15	.00	10	6.3	2.8	228	72	17	.78	.07	11	.57
22	4.0	.00	5.6	5.5	2.9	164	47	17	1.0	.02	13	.43
23	4.8	.00	5.4	4.7	3.2	124	65	12	1.0	.67	16	.25
24	1.9	.00	8.3	4.3	3.5	144	55	10	1.1	.84	6.3	.04
25	.67	.00	23	4.2	3.8	212	26	8.2	1.3	.16	6.3	.51
26	.62	42	9.4	3.9	3.9	176	23	6.8	1.3	.80	11	.30
27	.69	39	5.8	3.7	3.1	116	22	5.1	.80	.36	13	.00
28	1.8	18	4.6	3.6	4.6	174	300	3.9	.57	.46	6.3	.02
29	2.1	14	5.5	3.5	3.3	345	823	3.2	1.2	1.2	8.3	.14
30	1.5	12	5.5	3.3	---	385	568	2.9	2.1	1.3	11	.57
31	1.5	---	6.2	3.2	---	401	---	2.2	---	1.3	8.3	---
TOTAL	281.58	365.07	250.4	212.4	84.4	2595.1	9313	1624.3	69.12	21.39	249.17	24.42
MEAN	9.08	12.2	8.08	6.85	2.91	83.7	310	52.4	2.30	.69	8.04	.81
MAX	22	48	23	47	4.6	401	973	382	7.1	3.9	16	2.1
MIN	.62	.00	4.3	3.2	2.4	2.1	22	2.2	.57	.00	.57	.00

CAL YR 1979 TOTAL 14987.33 MEAN 41.1 MAX 669 MIN .00
WTR YR 1980 TOTAL 15090.35 MEAN 41.2 MAX 973 MIN .00

01383500 WANAQUE RIVER AT AWOSTING, NJ

LOCATION.--Lat 41°09'31", long 74°20'00", Passaic County, Hydrologic Unit 02030103, on right bank 700 ft (210 m) downstream from dam at outlet of Greenwood Lake at Awosting.

DRAINAGE AREA.--27.1 mi² (70.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1919 to current year. Prior to October 1940, published as "at Greenwood Lake".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922(M), 1928(M), 1936. WDR NJ-79-1: 1933(M), 1936(M), 1945(M), 1948(P), 1951(P), 1952(P), 1953(M), 1955(P), 1956(M), 1957(M), 1958(M), 1960(P), 1961(M), 1968(P), 1969(P).

GAGE.--Water-stage recorder. Concrete control since Oct. 31, 1938. Datum of gage is 601.32 ft (183.282 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Apr. 1, 1926, nonrecording gage and Apr. 1, 1926, to Oct. 31, 1938, water-stage recorder at site 100 ft (30 m) upstream at same datum.

REMARKS.--Water-discharge records good. Flow completely regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--61 years, 53.8 ft³/s (1.524 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft³/s (61.2 m³/s) Mar. 22, 1980, gage height, 6.26 ft (1.908 m), from rating curve extended above 750 ft³/s (21.24 m³/s) based on theoretical weir formula; no flow at times when gates at Greenwood Lake were closed and water below the spillway.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 27	1230	254	7.19	3.18	0.969	Apr. 10	1000	902	25.5	4.45	1.356
Mar. 22	1030	*2160	61.2	6.26	1.908	Apr. 29	2045	300	8.50	3.34	1.018

Minimum discharge, 0.44 ft³/s (0.012 m³/s) Aug. 20, 21, gage height, 1.33 ft (0.405 m).

REVISIONS.--The revised peak discharge published for Feb. 26, 1960 in WDR NJ-79-1 was actually the annual maximum discharge for Feb. 26, 1961.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	25	144	67	24	16	264	260	9.0	14	2.5	3.6
2	98	24	124	65	22	15	240	210	11	14	2.6	3.5
3	105	77	101	59	20	13	211	169	25	18	3.3	3.5
4	108	116	84	53	17	11	221	138	31	17	2.7	3.3
5	101	114	72	49	16	11	234	104	23	16	2.4	3.5
6	111	103	66	29	14	13	195	86	17	41	2.4	3.4
7	120	94	72	36	14	11	161	73	17	30	2.4	3.4
8	109	81	66	34	13	13	140	68	20	23	2.4	3.4
9	93	71	57	31	12	16	344	60	17	20	2.4	3.4
10	97	73	52	29	12	16	846	48	17	17	2.4	3.4
11	97	74	47	37	11	31	692	42	15	14	2.4	3.4
12	92	80	45	107	11	27	483	43	13	12	2.5	3.4
13	89	75	53	112	11	29	353	41	10	8.3	2.5	3.4
14	80	70	59	105	11	49	276	38	9.2	6.3	2.2	3.4
15	68	58	53	99	10	45	258	31	7.5	4.6	1.8	3.4
16	62	55	51	88	17	36	227	25	8.5	4.5	1.7	3.4
17	56	47	62	76	19	35	169	20	6.0	4.7	1.6	3.5
18	52	45	48	70	17	86	138	17	3.5	4.7	1.5	3.4
19	46	40	47	73	16	125	113	20	3.3	3.9	1.4	3.4
20	42	38	46	67	15	128	95	24	2.8	3.6	.82	3.4
21	40	37	41	60	15	505	86	29	3.5	3.0	1.4	3.4
22	38	34	39	54	18	2010	73	28	2.2	2.7	3.4	3.4
23	35	33	39	52	20	1430	59	24	2.2	8.3	3.2	3.5
24	42	31	43	47	21	951	51	22	2.2	9.4	2.9	3.6
25	37	31	71	43	21	745	46	21	2.2	5.8	3.0	3.6
26	32	84	94	39	21	548	43	17	2.2	4.7	3.0	3.6
27	28	241	94	36	19	394	42	11	2.2	3.8	2.9	3.5
28	28	245	92	34	19	297	94	7.8	2.2	2.9	3.0	3.4
29	32	213	79	31	18	268	275	5.8	3.0	2.9	3.3	3.4
30	30	172	67	29	---	267	292	4.4	17	2.9	3.4	3.4
31	28	---	61	26	---	258	---	4.9	---	2.6	3.4	---
TOTAL	2061	2481	2069	1737	474	8399	6721	1691.9	304.7	325.6	76.82	103.3
MEAN	66.5	82.7	66.7	56.0	16.3	271	224	54.6	10.2	10.5	2.48	3.44
MAX	120	245	144	112	24	2010	846	260	31	41	3.4	3.6
MIN	28	24	39	26	10	11	42	4.4	2.2	2.6	.82	3.3

CAL YR 1979 TOTAL 33957.10 MEAN 93.0 MAX 1110 MIN 4.5
WTR YR 1980 TOTAL 26444.32 MEAN 72.3 MAX 2010 MIN .82

01384000 WANAQUE RIVER AT MONKS, NJ

LOCATION.--Lat 41°07'14", long 74°17'41", Passaic County, Hydrologic Unit 02030103, on left bank just upstream from Wanaque Reservoir and 0.3 mi (0.5 km) downstream from bridge on Stonetown Road at Monks.

DRAINAGE AREA.--40.4 mi² (104.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for October to December 1934, published in WSP 1302.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 303.17 ft (92.406 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Records given herein include flow over spillway, through ports in dam, and down fish ladder in dam. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--46 years, 82.4 ft³/s (2.334 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,910 ft³/s (111 m³/s) Mar. 21, 1980, gage height, 4.30 ft (1.292 m) from high-water mark; no flow part of day in some years just after waste gate was closed and water was below intake to ports.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	2045	540	15.3	1.66	0.506	Apr. 9	1515	1515	41.1	2.67	0.814
Mar. 21	Unknown	*3910	111	a4.30	1.311	Apr. 28	1915	625	17.5	1.78	0.543

a - from high-water mark

Minimum discharge, 1.6 ft³/s(0.045 m³/s) Aug. 22, gage height, 0.06 ft (0.018 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	41	171	83	32	19	318	290	16	25	3.5	3.1
2	142	40	149	83	28	20	284	242	30	20	3.5	3.2
3	142	158	125	78	28	18	250	201	43	29	4.6	3.5
4	148	182	108	69	26	17	289	169	47	26	5.0	3.3
5	141	160	95	67	24	16	278	136	36	21	3.9	3.2
6	167	143	86	45	22	16	233	114	29	59	3.5	3.5
7	155	130	99	46	21	17	199	99	23	43	3.4	3.5
8	143	115	87	49	21	17	173	96	26	33	3.1	3.3
9	122	102	78	43	21	18	742	86	30	30	3.1	3.1
10	136	103	69	46	20	20	987	71	27	25	3.0	3.1
11	146	108	65	61	18	26	622	62	26	21	2.8	3.1
12	135	124	61	197	17	33	453	64	22	19	2.8	3.1
13	129	111	71	142	15	33	352	63	20	14	2.8	3.1
14	116	104	90	131	14	64	306	58	17	11	2.8	3.1
15	99	89	74	125	13	56	315	49	15	7.8	2.8	3.1
16	90	83	68	112	15	47	266	42	13	6.2	2.5	3.1
17	83	73	83	98	20	45	211	36	13	6.7	2.1	3.3
18	80	69	82	90	23	153	176	30	9.2	6.7	2.0	9.7
19	72	63	60	98	26	176	150	35	7.2	6.2	1.9	4.6
20	65	61	62	88	26	164	130	40	6.2	5.2	1.9	4.3
21	61	58	82	79	24	1050	117	45	5.7	4.8	1.9	4.3
22	56	55	57	71	22	1920	101	41	5.7	3.9	2.0	4.3
23	53	53	57	69	24	1090	87	37	4.8	12	3.5	4.1
24	62	50	62	62	27	728	77	34	4.8	18	3.5	3.9
25	57	49	130	63	30	631	69	30	4.3	11	3.1	3.9
26	50	206	141	53	29	479	65	22	4.3	7.8	3.1	4.2
27	44	360	127	49	28	375	61	16	3.9	6.2	3.1	3.9
28	46	289	121	47	27	305	239	11	3.9	5.2	3.1	3.9
29	54	247	108	43	26	297	415	9.0	3.5	4.3	3.1	3.9
30	49	203	92	38	---	308	337	7.4	30	4.8	3.1	3.9
31	45	---	84	34	---	301	---	10	---	4.3	3.1	---
TOTAL	2993	3629	2844	2359	667	8459	8302	2245.4	526.5	497.1	93.6	113.6
MEAN	96.5	121	91.7	76.1	23.0	273	277	72.4	17.6	16.0	3.02	3.79
MAX	167	360	171	197	32	1920	987	290	47	59	5.0	9.7
MIN	44	40	57	34	13	16	61	7.4	3.5	3.9	1.9	3.1

CAL YR 1979 TOTAL 46623.1 MEAN 128 MAX 1230 MIN 8.0
WTR YR 1980 TOTAL 32729.2 MEAN 89.4 MAX 1920 MIN 1.9

PASSAIC RIVER BASIN

01387000 WANAQUE RIVER AT WANAQUE, NJ

LOCATION.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, on left bank 750 ft (229 m) downstream from Raymond Dam in Wanaque, and 50 ft (15 m) upstream from bridge on State Highway 511.

DRAINAGE AREA.--90.4 mi² (234.1 km²), considered as 94 mi² (243 km²) Oct. 1, 1928, to Sept. 30, 1934.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1903 to December 1905 (gage heights only), September 1912 to April 1915, May 1919 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 210.00 ft (64.008 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Dec. 16, 1903, to Dec. 31, 1905, nonrecording gage on highway bridge at site 50 ft (15 m) downstream at different datum. Sept. 15, 1912, to Apr. 1, 1922, nonrecording gage at site 200 ft (61 m) downstream from present concrete control at different datum. Apr. 1, 1922 to Mar. 14, 1931, water-stage recorder at site 400 ft (122 m) downstream from present concrete control at present datum.

REMARKS.--Water-discharge records good. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in) 11 mi (17.7 km) above station, and since 1928 by Wanaque Reservoir (see Passaic River Basin, reservoirs in). North Jersey Water Supply Commission diverts water for municipal supply from Wanaque Reservoir. Water is diverted to Wanaque Reservoir from Post Brook at Wanaque and from Ramapo River at Pompton Lakes (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--63 years, (water years 1913, 1914, 1920-80), 79.1 ft³/s (2.240 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,470 ft³/s (240 m³/s) Mar. 31, 1951, gage height, 9.12 ft (2.780 m), from rating curve extended above 4,300 ft³/s (122 m³/s); minimum daily, 0.5 ft³/s (0.014 m³/s) Dec. 11, 12, 14-23, 1949, Sept. 11, 12, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,450 ft³/s (97.7 m³/s) Apr. 10, gage height, 7.33 ft (2.234 m); minimum, 2.1 ft³/s (0.059 m³/s) Sept. 26, gage height, 1.01 ft (0.308 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	38	21	20	18	699	640	19	19	17	16
2	25	18	39	21	19	18	592	451	19	18	17	16
3	20	20	32	21	18	18	473	352	19	18	17	16
4	20	19	24	21	19	18	463	305	20	18	17	16
5	19	19	26	21	18	18	597	199	20	19	17	14
6	19	19	23	20	18	18	431	151	19	18	17	10
7	19	19	20	20	18	18	333	113	18	18	16	10
8	19	18	20	20	18	18	260	129	18	17	16	8.5
9	19	18	19	20	18	18	938	125	18	17	16	7.3
10	19	18	19	19	18	18	2920	69	18	18	16	7.2
11	19	19	19	22	18	18	1670	46	18	19	16	7.2
12	19	19	19	21	18	18	1060	59	18	19	16	7.3
13	19	19	20	21	18	18	774	73	18	19	16	7.2
14	19	19	21	21	18	18	647	78	18	19	16	7.2
15	19	18	19	27	18	18	756	45	18	18	16	7.6
16	18	18	19	22	18	18	683	30	17	17	16	8.1
17	53	18	26	20	18	18	473	21	18	17	16	7.8
18	71	19	20	20	18	19	373	21	19	17	16	7.2
19	71	19	20	28	18	18	278	21	18	17	16	7.2
20	71	19	20	26	18	18	214	20	18	17	16	7.2
21	71	21	20	22	18	23	182	22	18	16	16	7.2
22	49	24	20	20	18	25	141	20	18	17	16	7.2
23	20	24	20	21	18	174	114	19	18	16	16	5.7
24	18	24	20	21	18	1110	88	19	18	16	16	3.8
25	18	24	21	20	18	1380	53	19	18	16	16	4.1
26	18	25	22	21	18	1250	44	22	18	16	16	3.5
27	18	24	22	20	18	922	37	20	18	16	16	3.0
28	19	24	23	19	18	629	254	19	18	16	16	3.0
29	18	24	22	19	18	495	1210	20	18	16	16	3.0
30	18	29	24	20	---	606	911	19	19	16	16	3.0
31	18	---	21	19	---	560	---	19	---	17	16	---
TOTAL	862	616	698	654	526	7535	17668	3166	549	537	502	238.5
MEAN	27.8	20.5	22.5	21.1	18.1	243	589	102	18.3	17.3	16.2	7.95
MAX	71	29	39	28	20	1380	2920	640	20	19	17	16
MIN	18	18	19	19	18	18	37	19	17	16	16	3.0

CAL YR 1979 TOTAL 28100.0 MEAN 77.0 MAX 1600 MIN 16
WTR YR 1980 TOTAL 33551.5 MEAN 91.7 MAX 2920 MIN 3.0

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1963 to current year.

COOPERATION.--Once daily water temperature records provided by North Jersey District Water Supply Commission. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 24.5°C Aug. 19, 20, 1965; minimum daily, 0.5°C Feb. 12, Mar. 1, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum daily, 22.0°C on several days during July and August; minimum daily, 0.5°C Feb. 12, Mar. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 29...	1025	19	98	7.1	3.0	13.7	.9	33	2	27
APR 07...	1330	328	89	7.2	6.5	12.8	.5	5	<2	26
JUN 10...	1125	18	88	7.4	8.5	11.9	1.1	<20	14	26
JUL 09...	1300	17	88	7.2	13.0	10.4	1.1	<20	33	26
AUG 12...	1130	16	89	7.1	11.0	10.6	1.1	11	79	27
SEP 15...	1200	7.6	95	6.9	13.0	9.8	1.8	110	33	29

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN 29...	7.2	2.3	6.1	.6	22	0	18	--	12	9.0
APR 07...	6.5	2.3	5.2	.7	17	0	14	--	11	8.0
JUN 10...	6.9	2.1	4.8	.6	22	0	18	.2	11	7.8
JUL 09...	6.8	2.1	4.9	.7	20	0	16	--	10	7.8
AUG 12...	6.9	2.3	5.3	.7	20	0	16	--	11	7.7
SEP 15...	7.6	2.5	5.1	.7	24	0	20	.0	9.1	7.9

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	.1	3.5	54	.06	E.030	--	.48	.54	.02	1.9
APR 07...	.1	3.0	56	.75	.160	.10	.26	1.0	.15	2.9
JUN 10...	.1	4.4	80	.45	.160	.15	.31	.76	.08	.9
JUL 09...	.1	4.9	56	.25	.150	.10	.25	.50	.16	1.0
AUG 12...	.1	6.3	68	.25	.230	.18	.41	.66	.03	5.4
SEP 15...	.1	6.0	57	.30	E.140	--	.58	.88	.09	--

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
JUN 10...	1125	--	--	--	20	0	--	0	30	0	--
SEP 15...	1200	5700	3.1	38	20	1	0	0	40	0	<10

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
JUN 10...	<10	--	--	2	--	250	--	0	--	430	--
SEP 15...	10	20	<10	3	50	350	11000	3	250	1200	790

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 10...	.7	1	--	0	--	10	--	0	--	--	--
SEP 15...	.7	4	20	0	0	60	330	0	350	.0	.0

DATE	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 15...	150	11	6.0	47	.0	1.9	.0	.0	.0	.0	.0

DATE	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 10...	--	--	--	--	--	--	--	--	--	--
SEP 15...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	13.0	---	---	2.0	.5	5.0	10.0	14.0	1[illegible].0	20.0	19.5
2	15.5	14.0	---	6.0	2.0	---	5.0	10.0	16.0	18.0	---	21.0
3	15.0	---	12.0	5.0	---	3.0	5.0	10.0	16.0	18.0	---	21.0
4	15.0	---	10.0	6.0	2.0	3.0	---	---	16.0	18.0	21.0	21.0
5	16.0	16.0	10.0	---	3.0	3.0	---	---	16.0	17.0	22.0	20.0
6	---	---	10.0	---	2.0	3.0	---	11.0	16.0	17.0	21.0	19.5
7	---	14.5	---	4.0	2.0	3.0	6.5	10.0	---	18.0	21.0	---
8	---	13.0	9.0	4.0	1.0	---	7.0	12.0	---	19.0	21.0	19.5
9	18.0	13.5	9.0	4.0	1.0	---	7.0	12.0	16.0	18.0	---	20.0
10	17.0	---	10.0	4.0	---	3.0	6.0	12.0	15.0	19.0	---	20.0
11	16.5	---	9.0	4.0	2.0	3.5	6.0	12.0	15.0	19.0	21.0	19.0
12	18.0	---	9.0	---	.5	3.0	6.0	12.0	15.0	---	20.0	20.0
13	17.0	14.0	10.0	---	2.5	3.0	6.0	11.0	15.0	---	22.0	---
14	---	12.0	10.0	8.0	3.0	---	7.0	11.0	16.0	19.0	20.0	---
15	14.0	12.0	---	---	2.0	---	8.0	12.0	---	19.0	---	20.0
16	13.0	12.0	---	5.0	---	---	8.0	12.0	16.0	19.0	---	21.0
17	13.5	10.0	8.0	4.0	---	3.5	8.0	---	16.0	19.0	---	20.0
18	13.0	---	8.5	4.0	---	4.0	9.0	---	16.0	19.0	21.0	19.0
19	13.0	12.0	9.0	4.0	2.0	4.0	---	12.5	14.0	18.0	20.0	20.0
20	---	10.0	9.0	---	2.0	3.5	---	15.0	15.0	---	20.0	---
21	---	12.0	9.0	3.0	3.0	5.0	7.5	15.0	---	20.0	20.0	---
22	13.0	---	---	3.0	2.0	3.0	10.0	16.0	---	20.0	21.0	20.0
23	13.0	---	---	4.0	---	---	10.0	16.0	15.0	22.0	---	20.0
24	13.0	---	7.0	3.0	---	4.5	10.0	16.5	16.0	22.0	---	20.0
25	13.0	---	---	3.0	3.0	5.0	10.0	---	16.0	22.0	20.0	21.0
26	16.0	12.0	7.0	---	2.0	5.0	---	16.0	18.0	---	21.0	20.0
27	13.0	13.0	6.0	---	3.0	4.0	---	16.0	19.0	---	21.0	19.0
28	---	12.0	7.0	3.0	3.0	4.0	9.0	16.0	---	21.0	21.0	---
29	14.0	12.0	8.0	3.0	2.0	4.0	10.0	15.0	---	20.0	21.0	19.0
30	15.0	12.0	---	3.0	---	4.0	10.0	15.0	18.0	20.0	19.5	19.0
31	13.0	---	6.0	2.0	---	5.0	---	14.0	---	20.0	---	---
MEAN	15.0	12.5	9.0	4.0	2.0	3.5	7.5	13.0	16.0	19.0	20.5	20.0

01387420 RAMAPO RIVER AT SUFFERN, NEW YORK

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft (44.2 m) downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi (1.77 km) upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi^2 (241 km^2).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 264.44 ft (80.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow affected by diversion from Spring Valley Water Company well field upstream from station and by occasional regulation by Lake Sebago.

COOPERATION.--Figures of pumpage from well field furnished by Spring Valley Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 5,160 ft^3/s (146 m^3/s) Mar. 22, 1980 (gage height about 11.1 ft or 3.38 m) from rating curve extended above 1,800 ft^3/s (51 m^3/s) on basis of runoff comparison with station 1.5 mi (2.4 km) upstream; minimum 6.9 ft^3/s (0.20 m^3/s) Sept. 8, 1980, gage height, 1.29 ft (0.393 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31.2 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0630	1,470	41.6	5.97	1.820	Apr. 10	a0700	4,600	130	a10.5	3.20
Mar. 22	a0500	*a5,160	146	*a11.1	3.38	Apr. 29	a0800	1,310	37.1	a5.6	1.71

a About.

Minimum discharge, 6.9 ft^3/s (0.20 m^3/s) Sept. 8, gage height 1.29 ft (0.393 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	41	13	29
2									---	35	12	26
3									---	30	13	49
4									---	28	64	34
5									---	28	63	27
6									---	23	39	997
7									---	22	27	1280
8									---	18	22	460
9									---	17	18	226
10									---	16	16	164
11									---	15	16	135
12									---	14	54	115
13									---	13	140	100
14									---	14	105	100
15									---	16	74	133
16									---	16	52	102
17									---	70	38	85
18									---	48	32	58
19									---	44	41	50
20									---	34	39	44
21									---	26	32	46
22									---	23	28	220
23									---	21	26	210
24									---	19	25	120
25									---	19	24	96
26									---	18	28	86
27									---	16	25	80
28									25	15	23	74
29									25	14	21	72
30									34	14	40	80
31									---	13	39	---
TOTAL									---	740	1189	5298
MEAN									---	23.9	38.4	177
MAX									---	70	140	1280
MIN									---	13	12	26

01387420 RAMAPO RIVER AT SUFFERN, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	90	251	146	61	37	638	554	45	65	12	9.4
2	140	88	218	135	57	35	616	404	51	40	13	9.4
3	200	358	190	119	52	33	533	325	78	49	24	8.5
4	300	594	173	109	52	32	598	281	72	43	21	8.1
5	260	338	159	106	50	32	672	232	50	31	15	8.5
6	560	251	152	97	48	37	508	210	37	102	13	8.5
7	450	218	178	93	47	38	404	190	37	75	11	8.5
8	330	200	166	92	46	48	328	180	51	48	11	8.5
9	230	175	142	85	45	74	1160	192	53	37	13	8.1
10	260	171	131	83	45	72	3870	178	51	31	14	8.1
11	290	183	139	125	44	113	1820	164	44	25	14	7.7
12	270	237	146	464	43	106	990	164	36	22	13	8.1
13	240	237	164	266	42	77	693	164	31	18	13	44
14	220	213	213	200	41	88	559	152	27	17	13	22
15	190	190	185	190	40	92	625	152	24	16	13	13
16	170	178	166	166	48	74	537	144	21	14	13	9.9
17	150	161	178	150	44	75	386	131	20	13	13	11
18	140	150	175	142	42	464	322	95	17	13	11	33
19	135	137	180	152	42	598	281	106	15	11	11	20
20	125	131	178	144	45	296	251	115	14	13	11	17
21	120	125	178	129	48	1010	237	113	14	14	11	15
22	110	117	175	119	57	4540	221	121	12	14	11	13
23	110	111	166	117	62	2520	203	106	11	37	11	9.4
24	105	102	150	109	71	1330	185	95	11	31	10	14
25	100	104	254	104	68	1070	175	87	13	23	9.9	15
26	96	682	309	100	65	824	157	75	19	17	9.9	17
27	90	1320	226	93	54	611	146	66	9.9	14	9.9	16
28	96	745	195	92	43	472	397	59	8.5	11	9.9	17
29	110	441	178	87	40	426	1220	54	10	15	9.4	18
30	98	306	168	80	---	546	854	42	90	18	9.4	18
31	88	---	157	75	---	537	---	39	---	15	9.9	---
TOTAL	5883	8353	5640	4169	1442	16307	19586	4990	972.4	892	383.3	423.7
MEAN	190	278	182	134	49.7	526	653	161	32.4	28.8	12.4	14.1
MAX	560	1320	309	464	71	4540	3870	554	90	102	24	44
MIN	88	88	131	75	40	32	146	39	8.5	11	9.4	7.7
♦	4.6	1.5	3.0	1.8	4.6	4.5	3.0	3.8	7.1	5.7	0.7	5.2

WTR YR 1980 TOTAL 69041.4 MEAN 189 MAX 4540 MIN 7.7

♦ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WRD NY-79-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 10 ft³/s (0.28 m³/s), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--22 years, 25.0 ft³/s (0.708 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum 0.05 ft³/s (0.001 m³/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.67 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	0045	402	11.4	4.63	1.411
Nov. 26	1800	253	7.2	4.00	1.219
Mar. 21	1945	927	26.3	6.26	1.908
Apr. 10	0045	*966	27.4	*6.39	1.948
Apr. 28	2145	561	15.9	5.16	1.573

Minimum daily discharge, 0.40 ft³/s (0.01 m³/s) Sept. 16; minimum gage height 1.24 ft (0.378 m), Sept. 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	11	34	19	8.5	6.0	90	76	11	5.9	2.9	.51
2	27	11	29	18	8.0	6.0	74	59	10	5.1	2.0	.46
3	45	57	25	17	7.6	5.7	62	49	20	6.2	5.0	.46
4	44	50	23	15	7.6	5.7	89	41	14	4.9	2.5	.47
5	58	37	21	15	7.4	6.1	75	36	10	4.3	2.0	.62
6	158	29	20	13	7.2	6.6	59	32	7.9	13	4.1	.78
7	75	25	29	12	7.1	7.1	50	29	8.3	6.2	2.0	.71
8	50	22	22	13	7.1	7.7	44	47	9.0	4.3	1.5	.70
9	38	19	18	12	7.1	9.7	301	34	8.3	3.7	1.2	.70
10	42	21	17	11	7.2	9.2	587	26	9.1	3.2	.92	.73
11	44	22	16	36	7.1	19	205	24	7.6	3.1	.85	.76
12	38	40	15	74	7.0	12	117	28	6.7	2.8	.87	.75
13	36	30	25	39	6.7	9.8	86	30	6.1	2.2	.82	.75
14	29	27	27	29	6.6	11	88	23	5.6	2.0	.72	.63
15	25	24	19	28	6.6	11	94	18	5.3	2.0	.77	.47
16	22	22	17	24	7.6	9.7	70	16	5.1	2.0	.80	.40
17	20	20	20	21	7.1	12	57	15	4.7	2.2	.81	.80
18	18	19	15	20	6.6	111	49	16	4.2	2.5	.73	1.1
19	17	17	14	23	6.6	66	43	19	4.1	1.9	.78	.71
20	16	17	14	20	6.7	47	39	23	4.0	1.7	.80	.63
21	15	16	14	18	7.5	325	35	23	3.9	1.6	.76	.67
22	14	16	14	16	8.5	602	31	21	3.6	1.5	.71	.63
23	13	15	16	16	8.8	227	28	15	3.5	5.2	.70	.59
24	14	14	18	14	11	124	25	13	3.3	3.3	.66	.59
25	13	14	59	13	11	119	23	12	3.2	2.2	.64	.55
26	12	116	47	12	10	85	22	10	3.0	1.7	.55	.71
27	11	124	35	12	8.3	68	21	9.8	2.9	1.6	.51	1.0
28	14	73	28	11	7.5	58	166	9.1	2.9	1.4	.51	.80
29	15	53	24	11	6.6	65	227	8.6	3.2	1.9	.47	.87
30	13	41	22	9.8	---	72	113	8.3	14	2.6	.50	.94
31	12	---	20	9.2	---	77	---	8.6	---	3.7	.51	---
TOTAL	971	1002	717	601.0	222.6	2200.3	2970	779.4	204.5	105.9	38.59	20.49
MEAN	31.3	33.4	23.1	19.4	7.68	71.0	99.0	25.1	6.82	3.42	1.24	.68
MAX	158	124	59	74	11	602	587	76	20	13	5.0	1.1
MIN	11	11	14	9.2	6.6	5.7	21	8.3	2.9	1.4	.47	.40

CAL YR 1979 TOTAL 12885.30 MEAN 35.3 MAX 498 MIN 1.7
WTR YR 1980 TOTAL 9832.78 MEAN 26.9 MAX 602 MIN .40

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah. Water-quality samples collected at bridge 350 ft (107 m) upstream from gage at high flows.

DRAINAGE AREA.--118 mi² (306 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Occasional regulation from lakes and ponds upstream from the station.

AVERAGE DISCHARGE.--62 years (water years 1903-06,1923-80), 231 ft³/s (6.542 m³/s), 26.54 in/yr (674 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft³/s (352 m³/s) Oct. 9, 1903, gage height, 11.0 ft (3.35 m) from graph based on gage readings, site and datum then in use, from rating curve extended above 1,400 ft³/s (39.6 m³/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 7 ft³/s (0.20 m³/s) Dec. 16, 1930, Sept. 12, 1932; minimum daily discharge, 8 ft³/s (0.23 m³/s) Aug. 25, 1929, Sept. 5, 12, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 27	0845	1720	48.7	7.55	2.301	Apr. 10	0545	5880	167	10.43	3.179
Mar. 22	0700	*6520	185	10.70	3.261	Apr. 29	0400	1940	54.9	7.86	2.396

Minimum discharge, 12 ft³/s (0.33 m³/s) Sept. 3, 4, 10-12; minimum gage height, 2.91 ft (0.887 m) Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	107	373	203	80	52	877	729	82	75	22	14
2	311	105	320	187	81	51	803	553	91	58	25	14
3	351	477	276	167	77	45	670	445	135	63	37	14
4	471	701	244	153	75	47	814	375	112	53	31	13
5	432	458	226	142	72	50	843	320	82	59	33	14
6	809	343	214	131	69	53	649	286	69	145	29	14
7	578	294	269	124	68	56	518	260	74	78	22	13
8	411	257	242	122	66	63	447	336	84	54	21	14
9	324	228	199	118	66	89	1660	282	85	46	20	14
10	358	240	179	110	65	88	4860	231	84	40	20	13
11	415	273	190	206	64	162	2210	208	74	35	20	13
12	382	370	201	679	65	129	1280	233	66	31	21	13
13	352	320	252	416	62	95	921	251	60	29	21	37
14	299	280	325	298	60	110	817	213	53	27	20	22
15	257	244	269	273	58	113	910	220	47	26	21	17
16	228	219	229	241	65	92	728	202	46	24	20	14
17	206	199	259	211	71	119	575	187	43	25	19	15
18	188	184	246	197	63	702	480	149	41	26	19	38
19	174	172	251	223	61	691	425	164	38	24	19	23
20	161	163	247	201	63	406	377	184	37	24	18	19
21	151	155	239	178	66	1760	341	182	36	23	17	19
22	139	148	240	163	76	5630	304	186	34	26	16	18
23	131	142	231	158	83	2740	276	153	31	64	16	15
24	130	138	211	151	92	1550	253	130	30	42	15	18
25	127	138	402	140	95	1350	235	122	33	31	15	20
26	116	703	472	134	88	1050	223	108	36	26	15	22
27	106	1580	345	126	77	799	222	96	29	22	15	20
28	119	923	288	121	70	649	830	90	26	20	15	22
29	142	601	256	116	56	655	1690	85	33	34	14	23
30	129	452	237	104	---	761	1090	77	143	29	14	24
31	115	---	220	95	---	763	---	76	---	25	14	---
TOTAL	8299	10614	8152	5888	2054	20920	26328	7139	1834	1284	624	549
MEAN	268	354	263	190	70.8	675	878	230	61.1	41.4	20.1	18.3
MAX	809	1580	472	679	95	5630	4860	729	143	145	37	38
MIN	106	105	179	95	56	45	222	76	26	20	14	13
CFSM	2.27	3.00	2.23	1.61	.60	5.72	7.44	1.95	.52	.35	.17	.16
IN.	2.62	3.35	2.57	1.86	.65	6.60	8.30	2.25	.58	.40	.20	.17

CAL YR 1979 TOTAL 122555 MEAN 336 MAX 4240 MIN 19 CFSM 2.85 IN 38.64
WTR YR 1980 TOTAL 93685 MEAN 256 MAX 5630 MIN 13 CFSM 2.17 IN 29.53

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 28...	1100	122	290	7.6	2.0	14.0	1.1	20	4	78
APR 14...	1220	806	185	7.4	10.5	10.7	--	--	--	51
JUN 10...	0915	85	358	7.7	14.5	8.4	1.6	40	350	100
JUL 09...	1040	48	352	7.7	20.5	6.8	3.0	230	140	95
AUG 06...	1000	30	424	7.4	23.0	3.2	7.8	>2400	>2400	120
SEP 16...	1100	15	442	7.5	18.0	5.8	5.4	230	79	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN 28...	21	6.3	22	1.0	68	0	56	--	20	33
APR 14...	14	3.8	13	.9	41	0	34	--	15	21
JUN 10...	28	7.7	27	1.4	95	0	78	.4	17	44
JUL 09...	26	7.2	26	1.7	88	0	72	--	20	45
AUG 06...	31	9.4	39	2.5	109	0	89	--	22	57
SEP 16...	28	8.1	40	2.6	93	0	76	.0	25	67

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 28...	.1	7.4	143	.92	--	--	--	--	.49	3.2
APR 14...	.1	5.6	104	--	--	--	.43	--	.54	2.6
JUN 10...	.1	7.0	216	1.5	.300	.54	.84	2.3	.40	4.3
JUL 09...	.1	6.9	192	1.0	.350	.53	.88	1.9	.29	3.7
AUG 06...	.2	8.5	259	1.0	.600	1.4	2.0	3.0	1.0	6.7
SEP 16...	.2	10	242	1.2	1.300	1.3	2.6	3.8	1.7	5.2

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 10...	0915	30	0	0	50	0	<10	6
SEP 16...	1100	20	1	0	120	0	10	8

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 10...	590	4	140	.1	4	0	20	0
SEP 16...	550	3	250	.2	47	0	30	0

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, on right end of dam at pumping station in Pompton Lakes and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--160 mi² (414 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1552: 1922(M), 1924-25, 1929-31(M), 1934-35(M). WRD-NJ 1970: 1968-69.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 201.08 ft (61.289 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Diversion by North Jersey Water Supply Commission to Wanaque Reservoir since December 1953, for municipal supply (records given herein). Slight regulation by Pompton Lake, capacity, 300,000,000 gal (1.136 hm³).

AVERAGE DISCHARGE.--59 years, 303 ft³/s (8.581 m³/s), 25.72 in/yr (653 mm/yr), adjusted for diversion since Dec. 1, 1953.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s (348 m³/s) Mar. 12, 1936, gage height, 3.56 ft (1.085 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of theoretical weir formula; maximum gage height, 4.40 ft (1.341 m) Oct. 16, 1955; no flow part of September 30, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 27	1230	1770	50.1	1.37	0.418	Apr. 10	1015	6120	173	2.96	0.902
Mar. 22	1415	*6700	190	3.13	0.954	Apr. 29	0215	2740	77.6	1.79	0.546

No flow part of Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	145	524	276	116	60	1160	1040	127	116	35	16
2	419	141	457	269	113	77	1040	796	150	75	38	16
3	459	449	406	244	106	60	897	642	181	78	45	19
4	617	856	359	220	114	54	996	543	198	76	46	18
5	528	638	329	200	104	71	1040	462	134	69	58	18
6	931	467	314	181	98	71	900	409	110	186	64	22
7	825	400	370	170	92	77	719	374	110	145	44	18
8	574	351	345	165	90	83	580	481	117	94	37	15
9	453	315	288	165	90	97	1240	439	120	78	34	15
10	469	310	253	152	88	111	5400	358	134	67	30	15
11	566	340	245	205	85	209	3290	317	115	59	30	17
12	527	466	260	880	86	174	1710	348	99	52	30	31
13	493	439	308	661	77	130	1140	417	87	46	28	30
14	424	382	416	448	77	145	967	348	77	43	27	40
15	358	336	369	391	77	158	1090	334	70	40	30	32
16	321	300	313	350	88	135	931	315	66	42	30	25
17	295	271	328	311	89	145	735	298	63	38	28	23
18	272	253	316	291	83	735	639	260	61	37	27	33
19	252	236	310	325	83	958	549	247	58	35	30	38
20	235	223	308	307	81	604	472	286	55	32	29	30
21	223	213	304	267	82	1410	413	280	52	31	26	27
22	212	201	308	245	85	5920	369	308	51	30	26	25
23	198	194	310	237	104	4010	332	257	45	50	26	23
24	189	186	293	222	118	2120	311	225	43	64	23	20
25	197	179	474	204	118	1720	292	199	42	47	22	21
26	174	529	610	194	126	1390	275	175	45	40	23	22
27	153	1670	471	182	111	1060	270	151	42	34	22	20
28	159	1280	384	179	104	843	1010	139	36	31	20	23
29	194	835	337	165	83	815	2470	130	36	39	20	22
30	181	621	312	152	---	985	1600	122	119	47	20	11
31	161	---	290	140	---	995	---	117	---	40	18	---
TOTAL	11329	13226	10911	8398	2768	25422	32837	10817	2643	1861	966	685
MEAN	365	441	352	271	95.4	820	1095	349	88.1	60.0	31.2	22.8
MAX	931	1670	610	880	126	5920	5400	1040	198	186	64	40
MIN	153	141	245	140	77	54	270	117	36	30	18	11
(†)	0	0	0	0	0	0	0	0	0	0	0	1.2
MEAN‡	365	441	352	271	95.4	820	1095	349	88.1	60.0	31.2	24.0
CFSM‡	2.28	2.76	2.20	1.69	.60	5.12	6.84	2.18	.55	.38	.20	.15
IN‡	2.63	3.07	2.54	1.95	.64	5.91	7.63	2.51	.61	.43	.22	.16

CAL YR 1979 TOTAL 159910 MEAN 438 MAX 4380 MIN 35 MEAN‡ 448 CFSM‡ 2.80 IN‡ 38.15
WTR YR 1980 TOTAL 121863 MEAN 333 MAX 5920 MIN 11 MEAN‡ 333 CFSM‡ 2.08 IN‡ 28.33

† Diversion, in cubic feet per second, at station to Wanaque Reservoir for municipal supply. Records of diversion furnished by North Jersey District Water Supply Commission.

‡ Adjusted for diversion.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, 800 ft (240 m) below confluence of Pequannock and Ramapo Rivers, 100 ft (30 m) upstream from Jackson Avenue Bridge, and 0.7 mi (1.1 km) east of Pompton Plains.

DRAINAGE AREA.--355 mi^2 (919 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1903 to December 1904, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1202: 1945(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 160.00 ft (48.768 m) corrected, National Geodetic Vertical Datum of 1929. March 1903 to December 1904, nonrecording gage on main spillway of dam 2,000 ft (610 m) upstream at different datum. May 1940 to September 1964 two water-stage recorders, each above a concrete dam about 2,000 ft (610 m) upstream at datum 14.46 ft (4.407 m) higher.

REMARKS.--Water-discharge records poor. Water diverted from reservoirs on Pequannock and Wanaque Rivers and from Pompton River to Point View Reservoir for municipal supply (see Passaic River Basin, diversions). Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake on Wanaque River (see Passaic River Basin, reservoirs in). Some diurnal fluctuations at low flow caused by powerplant on Wanaque River.

COOPERATION.--Gage-height record collected in cooperation with Passaic Valley Water Commission.

AVERAGE DISCHARGE.--41 years, (water years 1904, 1941-80), 486 ft^3/s (13.76 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,340 ft^3/s (803 m^3/s) Oct. 10, 1903, gage height, 14.3 ft (4.36 m) site and datum then in use, by computation of peak flow over dam; no flow Aug. 18-20, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s (90.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1400	9300	263	17.74	5.407
Apr. 10	1415	*12000	340	19.56	5.962
Apr. 29	0945	6380	181	15.64	4.767

Minimum discharge, 21 ft^3/s (0.59 m^3/s) Sept. 30; gage height, 7.00 ft (2.134 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	377	209	640	392	172	113	2860	2640	192	174	69	46
2	504	202	520	392	172	124	2470	1920	239	120	84	45
3	555	751	520	367	154	110	2070	1510	301	123	100	44
4	727	1140	440	330	159	116	2420	1290	306	120	82	44
5	620	852	360	324	150	117	2590	1110	212	111	101	55
6	1100	623	350	290	146	122	1960	1010	167	311	110	65
7	972	516	330	270	145	123	1670	858	173	201	79	53
8	680	451	400	264	141	134	1410	1020	188	134	68	48
9	523	421	360	253	141	165	3060	909	197	116	67	44
10	589	415	350	238	139	175	10800	702	218	104	60	41
11	715	446	330	400	137	312	7880	565	177	96	59	39
12	640	676	356	1380	138	281	4330	630	153	91	58	53
13	600	589	367	985	133	207	2830	786	139	84	58	53
14	507	501	349	707	131	239	2360	690	128	77	57	62
15	441	437	340	607	129	252	2750	549	118	74	58	58
16	411	406	335	519	153	212	2370	446	115	87	58	50
17	395	378	393	453	146	235	1840	407	108	78	55	48
18	398	354	417	427	139	1200	1570	387	104	73	55	62
19	377	337	410	500	138	1340	1360	365	99	69	55	60
20	355	310	412	449	138	943	1170	386	97	66	56	53
21	340	302	405	402	141	2580	1040	398	94	64	56	48
22	319	291	408	366	163	8460	868	420	89	62	54	45
23	268	281	412	356	173	6270	807	356	84	95	54	45
24	267	276	411	340	197	4250	745	317	78	108	51	39
25	264	276	763	309	206	3950	624	290	79	82	50	37
26	234	782	905	297	189	3140	570	261	78	73	49	38
27	207	1990	693	278	163	2290	526	230	81	67	48	33
28	227	1680	552	268	153	1820	2160	203	73	62	47	33
29	272	1170	466	257	132	2010	6040	185	72	80	47	32
30	250	860	442	233	---	2400	4200	174	218	84	47	28
31	224	---	418	213	---	2450	---	169	---	73	47	---
TOTAL	14358	17922	13854	12866	4418	46140	77350	21183	4377	3159	1939	1401
MEAN	463	597	447	415	152	1488	2578	683	146	102	62.5	46.7
MAX	1100	1990	905	1380	206	8460	10800	2640	306	311	110	65
MIN	207	202	330	213	129	110	526	169	72	62	47	28

CAL YR 1979 TOTAL 249984 MEAN 685 MAX 7050 MIN 67
WTR YR 1980 TOTAL 218967 MEAN 598 MAX 10800 MIN 28

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ

LOCATION.--Lat 40°56'36", long 74°16'47", Morris County, Hydrologic Unit 02030103, at bridge on State Highway 504 in Packanack Lake, and 2.2 mi (3.3 km) downstream from confluence of Pequannock and Wanaque Rivers.

DRAINAGE AREA.--361 mi² (935 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1450	696	175	6.8	11.0	11.2	2.0	--	--	55
FEB 26...	1040	191	320	7.5	3.5	13.2	3.9	22	31	88
MAR 17...	1035	205	285	7.3	3.5	14.0	3.8	130	17	73
JUN 09...	1315	178	280	7.7	19.0	8.1	4.2	220	110	69
JUL 10...	1145	104	297	7.8	25.0	6.4	4.3	330	33	82
AUG 13...	1030	58	290	7.4	24.0	4.3	4.5	2200	110	86
SEP 18...	1200	63	290	7.4	20.0	6.4	7.1	5400	840	80

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 11...	15	4.2	14	1.0	48	0	39	.0	15	19
FEB 26...	24	6.7	26	1.3	73	0	60	--	21	43
MAR 17...	20	5.7	24	1.2	63	0	52	--	19	39
JUN 09...	20	4.6	18	1.3	76	0	62	.2	17	29
JUL 10...	22	6.6	23	1.8	73	0	60	--	19	34
AUG 13...	23	6.9	21	2.0	66	0	54	--	21	35
SEP 18...	21	6.6	22	2.1	68	0	56	.0	24	34

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	.1	8.9	107	--	--	--	E.96	--	--	2.5
FEB 26...	.1	6.1	167	E1.1	.540	.60	1.1	--	1.0	1.9
MAR 17...	.1	5.4	154	.78	.550	.55	1.1	1.9	.18	4.6
JUN 09...	.1	4.8	164	1.4	.450	.65	1.1	2.5	.33	4.2
JUL 10...	.1	5.5	168	1.0	.300	.80	1.1	2.1	.51	4.1
AUG 13...	.1	4.9	184	.99	.300	1.1	1.4	2.4	.74	5.7
SEP 18...	.1	5.2	157	1.1	.560	1.3	1.9	3.0	1.2	4.7

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 11...	1450	900	.2	5.0	40	1	0	0	30	0	<10
JUN 09...	1315	--	--	--	30	0	--	0	60	0	--
SEP 18...	1200	580	.0	9.9	30	1	0	0	110	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 11...	20	<10	<10	5	10	490	6900	6	40	50	140
JUN 09...	10	--	--	5	--	480	--	5	--	130	--
SEP 18...	10	<10	<10	12	<10	610	3100	8	<10	180	160

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.2	.00	7	10	0	1	0	90	2	27	.0
JUN 09...	<.1	--	2	--	0	--	10	--	0	--	--
SEP 18...	.2	.00	3	<10	0	0	20	20	2	1	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	11	1.2	1.0	.6	.0	.4	.0	.0	.0	.0
JUN 09...	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	.0	1	.3	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
JUN 09...	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ

LOCATION.--Lat 40°53'32", long 74°15'58", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Singac, and 0.6 mi (1.0 km) downstream from Pompton River.

DRAINAGE AREA.--745 mi² (1,930 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 24...	1430	E680	320	7.3	15.5	6.3	22	--	--	30	1.3
NOV 13...	1510	E1500	240	7.3	9.5	8.9	23	3400	--	13	.90
DEC 11...	1405	E800	275	7.5	5.5	10.2	11	K20	--	2	1.2
JAN 22...	1410	E960	270	7.2	3.0	11.5	21	270	--	9	1.1
FEB 12...	1535	E350	440	7.5	2.5	11.2	--	--	--	--	--
MAR 19...	1320	E2400	245	7.4	4.5	11.9	17	200	--	33	.97
APR 23...	1420	E1500	250	7.4	15.5	9.0	37	4800	--	34	.69
MAY 14...	1425	E1600	230	7.5	18.0	6.8	29	1600	--	21	1.2
JUN 17...	1525	E330	435	7.8	23.5	6.1	41	470	--	15	1.9
JUL 21...	1530	E200	490	8.1	28.0	9.8	--	250	--	--	--
AUG 27...	1400	E170	475	7.6	26.5	7.2	31	1200	55	8	2.4
SEP 09...	1410	E150	535	7.7	23.0	7.8	38	360	--	7	2.1

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)
OCT 24...	1.000	1.2	.90	1.9	3.2	.370	4	0	--	.00	34
NOV 13...	.600	.73	.60	1.2	2.1	.250	4	0	--	.01	21
DEC 11...	1.200	1.5	.70	1.9	3.1	.300	4	0	10	.00	10
JAN 22...	.920	1.1	.78	1.7	2.8	.300	3	1	20	.01	8
FEB 12...	--	--	--	--	--	--	--	--	--	--	7
MAR 19...	.560	.68	.00	.56	1.5	.220	4	0	--	.01	32
APR 23...	.540	.65	.35	.89	1.6	.220	4	0	--	.00	--
MAY 14...	.230	.28	.41	.64	1.8	.300	3	1	20	.00	--
JUN 17...	1.900	2.3	1.6	3.5	5.4	.620	3	0	20	.01	--
JUL 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	2.800	3.4	.40	3.2	5.6	.930	--	--	--	.01	--
SEP 09...	3.600	4.4	1.0	4.6	6.7	1.000	4	0	10	.00	--

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, on left bank 0.6 mi (1.0 km) downstream from Beattie's Dam in Little Falls, and 1.0 mi (1.6 km) upstream from Peckman River. Daily dissolved oxygen and water temperature data collected 0.5 mi (0.8 km) upstream from gaging station.

DRAINAGE AREA.--762 mi^2 (1,974 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1897 to current year. Monthly discharge only for September 1897, published in WSP 1302. Published as "at Paterson" September 1897 to September 1955.

GAGE.--Water-stage recorder. Datum of gage is 120.00 ft (36.576 m) National Geodetic Vertical Datum of 1929 (levels by Passaic Valley Water Commission). Prior to Jan. 8, 1933, nonrecording gage and Jan. 8, 1933, to Sept. 30, 1955, water-stage recorder, at site 3.7 mi (6.0 km) downstream, National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Diurnal fluctuation at medium and low flow caused by hydroelectric plant at Beattie's Dam. Flow regulated by reservoirs in Rockaway, Pequannock, Wanaque, and Pompton River Basin (see Passaic River Basin, reservoirs in). Large diversions for municipal supply from Passaic River above Beattie's Dam, and from Rockaway, Pequannock, and Wanaque Rivers (see Passaic River Basin, diversions). In addition, the Commonwealth Water Co., diverts from Canoe Brook near Summit and from Passaic River (see Passaic River Basin, diversions); that company and the city of East Orange also divert water for municipal supply by pumping wells.

COOPERATION.--Gage-height record collected in cooperation with the Passaic Valley Water Commission.

AVERAGE DISCHARGE.--83 years, 1,169 ft^3/s (33.11 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,700 ft^3/s (898 m^3/s) Oct. 10, 1903, present site; no flow July 3-5, 1904, July 16, 23, 1905.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (125 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 23	1815	8700	246	8.48	2.585	Apr. 11	1700	*9870	279	9.06	2.761
Apr. 1	0115	5140	146	6.44	1.963	Apr. 30	1530	5800	164	6.86	2.091
Apr. 5	0145	4960	140	6.32	1.926						

Minimum discharge, 37 ft^3/s (1.06 m^3/s) Sept. 30, gage height, 0.13 ft (0.040 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	522	1850	840	387	312	5120	5410	477	511	195	70
2	1350	486	1570	775	374	298	4950	4640	519	348	214	65
3	1530	975	1260	746	347	280	4680	3880	636	276	393	81
4	1700	1670	1050	690	330	270	4750	3280	804	240	259	89
5	1680	1770	927	648	334	286	4930	2760	674	201	216	87
6	1830	1550	865	602	328	304	4600	2280	484	480	368	110
7	1820	1310	1100	551	333	299	4090	1870	434	530	273	86
8	1450	1100	1180	535	329	320	3560	1820	454	361	185	67
9	1140	964	1070	511	304	436	3960	1710	429	255	134	63
10	1230	917	878	487	304	516	6970	1480	522	221	126	66
11	1540	1000	774	553	325	867	9580	1270	511	189	117	55
12	1570	1400	762	1860	308	933	9210	1200	396	174	123	56
13	1560	1490	876	2010	284	791	7510	1530	348	181	136	74
14	1440	1430	1170	1890	305	684	6060	1590	294	142	118	76
15	1260	1280	1170	1810	293	682	5390	1560	285	133	115	76
16	1070	1090	1020	1650	329	665	4870	1440	263	189	115	68
17	948	915	1030	1390	367	696	4180	1180	244	214	101	67
18	918	821	956	1150	342	1840	3530	942	235	170	94	183
19	843	751	845	1220	331	2360	3020	823	218	145	93	214
20	760	699	784	1230	338	2280	2600	775	217	132	147	119
21	702	667	753	1120	346	3200	2200	794	215	126	137	83
22	665	636	769	943	395	6150	1800	876	183	131	115	74
23	585	598	784	844	446	8420	1470	800	180	240	107	86
24	584	569	854	781	551	8490	1220	663	179	270	96	93
25	571	556	1290	705	558	8080	1060	597	180	177	85	69
26	533	1060	1690	633	559	7390	945	535	181	141	85	60
27	484	2430	1670	578	457	6400	896	453	158	127	84	55
28	483	2760	1500	542	412	5410	1990	384	142	121	83	47
29	578	2430	1280	520	369	4800	4720	362	145	180	80	44
30	595	2120	1060	460	---	4720	5680	338	484	273	80	41
31	569	---	927	432	---	4720	---	328	---	231	78	---
TOTAL	32993	35966	33714	28706	10685	82899	125541	47570	10491	7109	4552	2424
MEAN	1064	1199	1088	926	368	2674	4185	1535	350	229	147	80.8
MAX	1830	2760	1850	2010	559	8490	9580	5410	804	530	393	214
MIN	483	486	753	432	284	270	896	328	142	121	78	41

CAL YR 1979 TOTAL 590656 MEAN 1618 MAX 10200 MIN 153
WTR YR 1980 TOTAL 422655 MEAN 1155 MAX 9580 MIN 41

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.
DISSOLVED OXYGEN: October 1970 to current year.
SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

COOPERATION.--Once daily dissolved-oxygen and water-temperature records provided by the Passaic Valley Water Commission. Selected analyses of fecal coliform and fecal streptococci by the MPN method, were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 28.5°C July 21, 22, 1963 and July 19, 1968; minimum daily, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum daily, 14.4 mg/L Jan. 7, 1973; minimum daily, 1.7 mg/L June 23, 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 27.0°C Aug. 9; minimum daily, 0.5°C on several days during February and March.
DISSOLVED OXYGEN: Maximum daily, 12.8 mg/L Dec. 21; minimum daily, 2.3 mg/L Sept. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 25...	1010	581	325	7.6	14.5	9.0	8.0	4.6	450	220
NOV 14...	1040	1440	238	7.4	9.0	6.0	10.4	4.3	1700	440
DEC 12...	1025	764	280	7.4	6.0	3.0	10.6	4.2	410	480
JAN 23...	1050	842	265	7.4	3.0	.80	11.8	3.6	100	K38
FEB 13...	1020	297	465	7.6	2.0	1.0	11.1	4.6	260	K1200
MAR 20...	1110	2280	225	7.3	5.5	.35	12.2	3.5	310	88
APR 24...	1045	1220	252	7.5	14.5	12	8.4	3.6	190	K35
MAY 15...	0910	1570	227	7.7	17.5	21	7.2	4.7	900	170
JUN 18...	1145	234	446	7.4	21.5	.50	4.0	6.2	450	K55
JUL 22...	0925	122	445	8.2	28.5	5.6	6.7	7.7	730	360
AUG 06...	1115	391	400	7.5	27.0	11	4.0	7.4	1600	560
SEP 10...	1105	73	500	8.1	22.5	.40	7.2	8.5	K310	K170

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 25...	91	24	7.6	25	2.3	53	30	34	.2	12
NOV 14...	71	19	5.7	17	1.9	48	23	23	.1	11
DEC 12...	76	20	6.3	18	2.0	49	25	27	.1	11
JAN 23...	79	21	6.5	20	1.4	48	28	29	.1	11
FEB 13...	120	31	9.4	37	2.9	76	38	55	.2	13
MAR 20...	54	14	4.5	19	1.4	29	17	31	.1	6.7
APR 24...	68	18	5.6	17	1.6	39	24	26	.1	7.3
MAY 15...	60	15	5.5	19	1.3	42	20	22	.1	8.4
JUN 18...	110	29	9.0	36	3.0	69	38	51	.2	12
JUL 22...	110	30	9.4	42	3.5	74	40	54	.2	10
AUG 06...	100	26	8.7	43	3.1	67	33	54	.2	11
SEP 10...	130	35	11	42	4.3	71	41	58	.3	12

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT 25...	194	25	39	91	1.5	1.5	1.100	1.000	.90	.90
NOV 14...	142	18	70	83	.87	.87	.520	.520	.58	.58
DEC 12...	161	7	14	74	1.3	1.3	1.400	--	.40	--
JAN 23...	166	8	18	52	1.0	.96	.880	.760	.62	.54
FEB 13...	244	4	3.2	--	1.8	1.7	3.500	3.100	.40	.40
MAR 20...	136	28	172	66	.78	.78	.520	.510	.29	.00
APR 24...	179	--	--	--	.81	.80	.690	.650	.41	.00
MAY 15...	137	46	195	88	1.3	1.3	.340	.340	.35	.35
JUN 18...	252	21	13	84	1.8	1.8	1.900	1.900	1.2	1.1
JUL 22...	275	19	6.3	84	1.8	1.6	1.800	1.700	.60	.40
AUG 06...	245	22	23	74	1.4	1.4	1.100	1.100	.60	.60
SEP 10...	274	11	2.2	93	2.0	1.9	3.000	3.000	.30	.30

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 25...	2.0	.10	1.9	3.4	3.5	.390	.230	4.7	--	--
NOV 14...	1.1	.00	1.1	2.0	2.0	.260	.150	--	7.0	.6
DEC 12...	1.8	.00	1.8	3.1	3.1	.380	.270	5.8	--	--
JAN 23...	1.5	.20	1.3	2.3	2.5	.280	.200	6.5	--	--
FEB 13...	3.9	.40	3.5	5.2	5.7	.790	.720	--	5.0	.3
MAR 20...	.81	.30	.51	1.3	1.6	.200	.090	5.6	--	--
APR 24...	1.1	.45	.65	1.4	1.9	.320	.080	3.9	--	--
MAY 15...	.69	.00	.69	2.0	2.0	.430	.120	--	6.0	.7
JUN 18...	3.1	.10	3.0	4.8	4.9	.580	.440	5.7	--	--
JUL 22...	2.4	.30	2.1	3.7	4.2	.640	.470	7.9	--	--
AUG 06...	1.7	.00	1.7	3.1	3.1	.830	.570	--	106	1.3
SEP 10...	3.3	.00	3.3	5.2	5.3	.790	.630	8.5	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 14...	1040	1	0	1	30	0	30	1	0	1	20
FEB 13...	1020	1	0	1	<50	<20	30	0	0	0	30
MAY 15...	0910	1	0	1	<50	--	20	2	0	2	10
AUG 06...	1115	2	0	2	100	80	20	2	0	2	10

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV 14...	10	10	2	2	0	8	3	5	900	750	150
FEB 13...	10	20	0	0	0	9	3	6	580	450	130
MAY 15...	--	<10	0	0	0	11	7	4	1600	1500	60
AUG 06...	--	<10	0	0	0	6	2	4	990	950	40

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV 14...	12	11	1	90	20	70	.3	.1	.2	3	0
FEB 13...	3	3	0	130	10	120	.1	.0	.1	3	0
MAY 15...	12	12	0	140	80	60	.2	.0	.2	6	6
AUG 06...	7	7	0	190	90	100	.1	--	<.1	5	5

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 14...	3	1	0	1	0	0	0	20	0	20
FEB 13...	3	0	0	0	0	0	0	30	0	30
MAY 15...	0	0	0	0	1	1	0	20	10	10
AUG 06...	0	0	0	0	0	0	0	30	27	3

DATE	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
NOV 14...	19	26.1	25.0	.640	.000	1719
FEB 13...	20	.000	.000	.000	.000	--
MAY 15...	20	15.8	14.7	12.2	.650	90.2
AUG 06...	--	15.8	10.0	35.4	6.51	164

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	10.0	6.5	5.0	.5	1.5	7.0	14.0	20.5	24.0	25.5	26.0
2	18.0	10.5	6.0	4.5	.5	.5	9.0	15.0	21.5	24.5	25.5	26.0
3	18.5	10.0	4.0	4.5	.5	1.0	9.5	15.0	22.0	23.0	25.5	26.0
4	18.0	10.0	5.0	3.5	1.0	3.0	10.5	16.5	21.5	23.0	26.0	25.0
5	18.0	10.5	5.0	3.0	1.0	4.5	10.5	16.5	21.0	24.0	26.0	25.0
6	17.0	10.5	5.5	2.0	1.5	5.0	10.5	18.0	20.5	24.0	26.0	24.0
7	15.5	10.0	6.0	3.0	1.5	4.5	10.5	18.0	20.0	23.5	26.0	24.5
8	16.5	10.0	---	3.0	2.0	8.0	12.0	18.0	20.5	22.0	26.0	23.0
9	14.5	10.5	---	3.5	1.5	8.0	13.0	16.0	19.0	23.0	27.0	21.5
10	14.0	11.0	5.0	3.0	1.5	8.0	12.0	15.5	18.5	24.0	26.5	21.5
11	11.5	11.5	5.5	4.0	1.0	6.0	11.0	16.0	17.0	25.0	26.5	21.0
12	11.5	11.5	6.5	4.5	3.0	6.0	13.0	16.0	17.0	24.5	26.0	21.0
13	11.5	11.0	6.5	3.5	2.0	4.5	13.5	17.0	18.5	24.0	25.0	21.0
14	12.0	10.5	6.0	4.0	2.0	3.5	14.0	18.5	25.5	24.5	25.0	21.5
15	11.0	10.0	5.0	4.0	2.0	3.0	14.0	19.5	26.0	24.5	24.5	21.5
16	11.0	9.0	5.0	4.0	2.0	3.0	13.5	17.0	22.0	25.0	23.5	20.5
17	11.0	8.5	3.5	5.0	.5	5.5	10.5	18.0	21.0	24.0	21.5	19.5
18	11.5	8.5	2.0	4.5	.5	6.5	10.0	18.5	21.0	26.0	21.5	19.5
19	13.5	8.5	1.5	6.0	2.0	5.5	11.0	18.5	22.0	26.0	22.0	19.5
20	14.0	9.5	1.0	6.0	2.0	6.5	13.5	19.0	21.5	26.0	23.0	21.0
21	15.0	9.5	1.5	---	4.5	3.5	15.0	19.5	20.5	26.5	21.5	21.5
22	15.5	9.5	1.5	5.0	5.0	6.0	14.0	18.5	21.0	26.0	21.5	21.0
23	17.0	9.5	4.5	5.0	6.0	5.5	14.0	20.0	23.5	26.0	21.5	23.0
24	17.0	10.5	6.0	3.0	6.0	6.0	14.0	20.5	23.5	26.0	22.0	21.0
25	15.0	11.5	6.5	3.0	6.0	6.0	15.5	21.5	25.0	26.0	23.0	20.5
26	14.0	14.0	7.0	3.0	4.0	5.5	16.0	20.5	24.5	25.0	23.0	19.5
27	13.0	11.0	6.0	2.0	4.5	5.5	16.0	20.5	26.0	25.5	24.0	16.5
28	11.5	11.5	3.5	3.0	4.5	5.5	14.0	19.0	26.0	25.5	24.5	16.5
29	12.0	10.0	5.0	3.5	2.0	8.5	13.0	19.5	26.0	25.5	25.0	16.5
30	10.5	8.5	5.0	2.0	---	8.5	11.5	20.5	25.0	24.5	25.0	16.5
31	9.5	---	4.5	2.0	---	8.5	---	20.5	---	25.5	25.0	---
MEAN	14.0	10.0	4.5	3.5	2.5	5.5	12.5	18.0	22.0	24.5	24.5	21.5

WTR YR 1980 MEAN 13.5 MAX 27.0 MIN .5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	10.1	9.5	11.2	11.9	10.0	10.9	9.4	4.0	3.5	3.0	5.0
2	6.3	9.8	9.7	11.4	11.7	10.0	10.6	9.7	4.0	3.7	7.7	5.2
3	6.8	7.7	10.7	11.2	11.9	10.8	9.9	7.7	4.0	3.0	4.1	4.8
4	6.9	7.8	11.1	10.8	10.6	10.3	10.1	7.0	3.8	3.7	3.5	3.0
5	6.6	9.1	11.0	10.5	10.1	9.6	10.2	7.6	4.1	4.1	4.3	3.8
6	6.8	9.3	10.7	10.7	10.1	10.0	10.1	6.9	3.8	5.1	3.3	3.2
7	7.1	8.7	10.4	11.0	10.0	9.1	9.6	6.6	4.8	4.6	3.2	3.5
8	7.3	8.8	---	10.4	9.9	9.2	9.9	6.0	4.5	4.3	3.3	3.5
9	6.8	8.7	---	10.4	9.5	9.0	9.6	7.2	4.7	4.6	3.7	5.0
10	7.4	8.6	10.7	10.2	10.4	8.5	10.4	7.5	4.7	4.7	3.5	4.8
11	8.4	8.1	10.5	10.6	10.1	9.1	10.2	7.4	5.3	4.9	7.7	5.9
12	8.9	8.5	10.3	10.5	10.0	9.5	9.7	7.1	5.0	4.9	7.7	5.7
13	9.1	9.0	9.9	11.1	9.0	10.2	9.5	7.4	5.0	5.2	7.9	7.2
14	9.2	8.5	10.0	11.4	9.6	9.8	9.7	6.9	5.1	5.6	8.3	6.0
15	8.8	8.8	10.2	10.2	9.2	10.2	9.3	6.3	4.8	5.6	4.3	5.4
16	9.0	8.9	10.1	11.0	7.5	10.4	9.4	6.8	4.6	4.5	4.7	5.0
17	8.7	9.5	11.0	10.8	9.5	10.0	9.7	6.7	6.3	3.8	4.3	4.5
18	8.5	9.3	11.3	10.6	11.8	9.7	10.0	6.2	4.0	3.8	5.8	4.4
19	9.7	9.1	12.0	10.6	9.3	10.2	9.8	6.0	4.3	4.0	5.2	3.7
20	7.9	8.8	12.2	9.8	9.8	10.6	9.7	5.8	4.6	3.9	3.7	4.2
21	7.4	8.9	12.8	10.5	9.9	9.6	10.8	5.7	4.4	5.8	3.1	3.5
22	6.9	8.3	12.7	10.4	10.0	10.3	10.8	5.8	4.3	5.5	3.4	4.3
23	6.5	8.6	11.7	10.6	9.8	11.0	9.4	5.7	5.4	4.5	3.6	4.8
24	5.9	8.5	10.6	10.8	8.9	10.4	9.2	4.7	4.8	3.5	4.0	3.8
25	5.7	7.9	10.7	11.0	9.5	11.2	9.0	4.7	5.7	7.9	4.9	3.7
26	6.2	4.9	10.5	11.1	9.5	10.1	7.4	5.0	4.9	---	6.5	3.0
27	6.9	8.4	11.2	12.4	9.1	10.4	7.6	4.8	5.5	---	6.3	3.8
28	7.5	9.2	---	11.0	10.2	9.9	8.8	5.0	5.1	5.7	5.1	2.3
29	7.6	9.1	11.5	11.0	10.2	10.3	10.1	4.6	5.2	6.0	5.1	4.0
30	7.7	9.4	11.3	11.2	---	9.4	10.2	4.0	5.7	4.3	5.0	4.1
31	8.1	---	11.0	11.6	---	9.4	---	4.6	---	4.5	4.9	---
MEAN	7.6	8.7	10.9	10.8	10.0	9.9	9.7	6.4	4.8	4.7	4.9	4.4

WTR YR 1980 MEAN 7.7 MAX 12.8 MIN 2.3

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NOV 14,79		MAR 20,80		MAY 15,80		JUN 18,80	
TIME	1040		1110		0910		1145	
TOTAL CELLS/ML	3100		2500		2600		12000	
DIVERSITY: DIVISION	1.3		0.7		1.5		1.1	
.CLASS	1.3		0.7		1.5		1.1	
..ORDER	1.8		1.6		2.4		1.8	
...FAMILY	2.0		2.6		2.9		2.6	
....GENUS	2.2		3.0		3.2		3.1	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	*	0	--	-	--	-	*	0
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	3300#	27
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	27	1	17	1	39	1	*	0
....CHLORELLA	--	-	--	-	--	-	1700	14
....CHODATELLA	--	-	17	1	*	0	--	-
....DICTYOSPHAERIUM	--	-	--	-	52	2	--	-
....KIRCHNERIELLA	*	0	--	-	--	-	100	1
....OOCYSTIS	--	-	--	-	--	-	250	2
....SELENASTRUM	--	-	100	4	*	0	150	1
....TETRAEDRON	--	-	--	-	--	-	*	0
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	210	7	100	4	52	2	1000	8
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	810	7
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	41	1	67	3	64	2	760	6
....CHLOROGONIUM	--	-	--	-	--	-	--	-
...VOLVOCACEAE								
....GONIUM	--	-	--	-	52	2	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	220	7	850#	34	350	13	2600#	21
....MELOSIRA	120	4	130	5	52	2	560	5
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	*	0	--	-	*	0	--	-
....COCCONEIS	*	0	--	-	--	-	--	-
....RHOICOSPHENIA	*	0	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	33	1	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	17	1	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	300	12	240	9	--	-
....FRAGILARIA	--	-	17	1	64	2	--	-
....SYNEDRA	27	1	84	3	26	1	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	2[illegible]	1	17	1	--	-	--	-
...NAVICULACEAE								
....NAVICULA	210	7	130	5	64	2	--	-
...NITZSCHIACEAE								
....NITZSCHIA	69	2	550#	22	100	4	*	0
...SURIRELLACEAE								
....SURIRELLA	--	-	33	1	--	-	--	-
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	52	2	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	110	4	--	-	370	14	250	2
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	1900#	63	--	-	900#	35	500	4

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	50	2	39	1	--	-
....TRACHELOMONAS	27	1	--	-	26	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE	JUL 22,80	AUG 6,80	SEP 10,80
TIME	0925	1115	1105
TOTAL CELLS/ML	40000	49000	38000
DIVERSITY: DIVISION	1.2	1.3	1.1
.CLASS	1.2	1.3	1.1
..ORDER	1.7	1.4	1.3
...FAMILY	2.6	2.0	1.9
....GENUS	3.3	2.5	2.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	--	-	--	-	--	-
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	3100	8	--	-	--	-
...MICRACTINIACEAE						
....MICRACTINIUM	5900	15	1200	2	2400	6
...OOCYSTACEAE						
....ANKISTRODESMUS	400	1	600	1	670	2
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	*	0	300	1	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	*	0	--	-	*	0
....SELENASTRUM	--	-	6000	12	540	1
....TETRAEDRON	*	0	300	1	270	1
...SCENEDESMACEAE						
....ACTINASTRUM	810	2	--	-	3200	9
....CRUCIGENIA	3200	8	1500	3	--	-
....SCENEDESMUS	13000#	32	21000#	44	20000#	53
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	1600	4	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	710	2	300	1	810	2
....CHLOROGONIUM	*	0	--	-	--	-
...VOLVOCACEAE						
....GONIUM	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	3400	9	2600	5	1900	5
....MELOSIRA	2200	6	600	1	*	0
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	400	1	--	-	--	-
....FRAGILARIA	--	-	--	-	1200	3
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	*	0	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	1100	3	450	1	270	1
...SURIRELLACEAE						

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
....SURIRELLA	--	-	--	-	--	-
...TABELLARIACEAE						
....TABELLARIA	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	810	2	1200	2	--	-
....ANACYSTIS	2400	6	12000#	24	6200#	16
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	710	2	--	-	--	-
....TRACHELOMONAS	--	-	600	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ

LOCATION.--Lat 40°53'37", long 74°07'46", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Elmwood Park, and 0.8 mi (1.3 km) upstream from Dundee Dam.

DRAINAGE AREA.--803 mi^2 (2,080 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 24...	1130	E630	340	7.4	16.5	7.4	18	--	--	19	1.9
NOV 13...	1235	E1600	265	7.5	9.5	11.2	25	3000	--	16	1.1
DEC 11...	1045	E820	282	7.5	3.5	12.9	12	1300	--	2	1.3
JAN 22...	1050	E960	295	7.3	3.0	14.4	22	400	32	11	1.2
FEB 12...	1315	E320	445	7.7	1.0	13.4	--	--	--	--	--
MAR 19...	1025	E2500	288	7.3	4.5	13.1	35	460	--	11	1.0
APR 23...	1040	E1600	252	7.7	14.5	10.2	24	3800	--	15	.81
MAY 14...	1230	E1700	255	7.7	18.0	8.8	31	1600	--	23	1.4
JUN 17...	1220	E290	520	7.5	22.5	.5	59	E800000	--	10	.15
JUL 21...	1310	E150	480	8.8	30.5	--	--	K300	--	--	--
AUG 27...	1045	E100	492	8.9	25.5	9.4	34	10000	68	3	2.8
SEP 09...	1220	E80	485	8.5	23.5	12.8	35	4000	--	13	2.7

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)
OCT 24...	.660	.80	1.2	1.9	3.8	.390	3	0	--	.00	27
NOV 13...	.600	.73	.60	1.2	2.3	.300	4	0	--	.01	24
DEC 11...	1.100	1.3	.70	1.8	3.1	.310	4	0	20	.01	7
JAN 22...	.880	1.1	.92	1.8	3.0	.270	7	1	20	.01	7
FEB 12...	--	--	--	--	--	--	--	--	--	--	4
MAR 19...	.790	.96	.41	1.2	2.2	.420	4	1	--	.01	59
APR 23...	.430	.52	.36	.79	1.6	.200	3	0	--	.00	--
MAY 14...	.390	.47	.42	.81	2.2	.230	3	1	30	.00	--
JUN 17...	2.100	2.5	2.3	4.4	4.6	.810	2	0	80	.01	--
JUL 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	.270	.33	.67	.94	3.7	.520	--	--	--	.01	--
SEP 09...	.320	.39	1.3	1.6	4.3	.730	4	0	30	.00	--

PASSAIC RIVER BASIN

01390500 SADDLE RIVER AT RIDGEWOOD, NJ

LOCATION.--Lat 40°59'05", long 74°05'30", Bergen County, Hydrologic Unit 02030103, on left bank 15 ft (4.6 m) upstream from bridge on State Highway 17 in Ridgewood and 2.8 mi (4.5 km) upstream from Hohokus Brook.

DRAINAGE AREA.--21.6 mi^2 (55.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to September 1974, October 1977 to current year. Operated as a maximum-stage gage water years 1975-77.

REVISED RECORDS.--WRD-NJ 1974: 1971.

GAGE.--Water-stage recorder. Datum of gage is 71.74 ft (21.866 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records fair. The flow past this station is affected by pumpage from wells by Hackensack Water Co. and others.

AVERAGE DISCHARGE.--23 years (water years 1955-74, 1978-80), 36.3 ft^3/s (1.028 m^3/s), 22.82 in/yr (580 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,650 ft^3/s (132 m^3/s) Nov. 8, 1977, gage height, 12.25 ft (3.734 m); minimum daily, 0.2 ft^3/s (0.006 m^3/s) Sept. 17, 18, 1966.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood on July 23, 1945, reached a discharge of 6,400 ft^3/s (181 m^3/s), at site 1.6 mi (2.6 km) upstream, drainage area, 19.1 mi^2 (49.5 km^2), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft^3/s (10.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2345	825	23.4	5.14	1.567	Mar. 21	Unknown	952	27.0	5.45	1.661
Nov. 26	1615	481	13.6	4.17	1.271	Apr. 10	0200	1120	31.7	5.82	1.774
Jan. 11	2330	417	11.8	3.96	1.207	Apr. 28	2200	*1490	42.2	6.66	2.030

Minimum discharge, 1.3 ft^3/s (0.037 m^3/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	15	30	23	13	8.1	142	94	23	11	4.3	2.3
2	44	13	27	23	11	7.3	87	81	37	8.3	9.4	1.9
3	65	97	25	22	11	6.5	73	74	50	12	8.5	1.9
4	35	41	25	20	11	10	150	66	28	9.7	5.0	1.9
5	130	21	24	19	11	10	94	61	16	11	4.3	2.1
6	166	18	26	18	10	11	71	57	13	59	4.0	2.3
7	35	17	49	17	10	13	63	55	23	11	3.5	2.3
8	23	15	29	17	10	20	59	109	22	8.1	3.2	2.0
9	23	15	24	17	9.5	28	457	62	24	7.1	3.0	2.5
10	53	17	23	16	9.8	25	428	51	27	6.8	2.7	2.0
11	44	22	22	66	10	70	135	48	15	6.3	2.8	2.1
12	30	68	21	128	9.5	30	109	62	12	5.7	3.3	1.9
13	27	26	49	39	9.3	22	97	89	11	5.2	3.0	2.2
14	21	22	46	31	9.0	34	124	54	10	5.0	2.9	2.1
15	18	18	28	28	9.1	31	129	41	9.5	4.8	2.9	3.0
16	17	17	25	24	12	28	88	36	9.4	4.7	2.9	2.1
17	16	15	33	22	12	35	76	32	8.6	5.0	2.7	2.4
18	15	15	23	23	11	140	69	31	8.2	4.6	2.7	9.3
19	15	15	21	39	11	60	64	33	8.1	4.3	3.0	2.7
20	14	14	20	22	10	40	61	35	8.0	3.8	3.1	1.9
21	14	14	20	19	13	310	57	52	7.9	3.7	2.9	2.2
22	13	13	20	17	16	290	52	39	7.1	4.3	2.9	1.8
23	13	13	24	17	17	110	50	28	6.7	14	2.7	2.1
24	15	13	30	16	20	80	47	25	6.6	8.1	2.6	1.7
25	13	12	121	15	19	120	43	22	6.2	5.1	2.4	2.0
26	13	209	52	13	15	71	41	19	5.9	4.2	2.0	1.9
27	13	104	35	13	12	63	45	18	5.8	3.8	1.8	1.9
28	20	50	29	13	11	58	483	17	5.5	3.5	2.1	1.8
29	21	39	27	12	9.5	99	273	15	6.7	7.8	1.9	2.0
30	16	33	27	12	---	111	117	15	48	7.0	1.9	1.9
31	16	---	25	12	---	146	---	16	---	4.7	2.0	---
TOTAL	1023	1001	980	773	341.7	2086.9	3784	1437	469.2	259.6	102.4	70.2
MEAN	33.0	33.4	31.6	24.9	11.8	67.3	126	46.4	15.6	8.37	3.30	2.34
MAX	166	209	121	128	20	310	483	109	50	59	9.4	9.3
MIN	13	12	20	12	9.0	6.5	41	15	5.5	3.5	1.8	1.7
CFSM	1.53	1.55	1.46	1.15	.55	3.12	5.83	2.15	.72	.39	.15	.11
IN.	1.76	1.72	1.69	1.33	.59	3.59	6.52	2.47	.81	.45	.18	.12

CAL YR 1979 TOTAL 17781.8 MEAN 48.7 MAX 736 MIN 8.1 CFSM 2.26 IN 30.62
WTR YR 1980 TOTAL 12328.0 MEAN 33.7 MAX 483 MIN 1.7 CFSM 1.56 IN 21.23

01391000 HOHOKUS BROOK AT HOHOKUS, NJ

LOCATION.--Lat 40°59'52", long 74°06'48", Bergen County, Hydrologic Unit 02030103, on left bank 500 ft (150 m) upstream from bridge on Maple Avenue in Hohokus, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--16.4 mi^2 (42.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1954 to September 1973, October 1977 to current year. Operated as a crest-stage partial-record station, water years 1974-77.

REVISED RECORDS.--WDR NJ-77-1: 1955(M), 1968(M), 1976(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 120.09 ft (36.603 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good except those above 100 ft^3/s (2.8 m^3/s), which are poor. Some regulation at low and medium flows caused by unknown sources.

AVERAGE DISCHARGE.--22 years, (water years 1955-73, 1978-80) 32.6 ft^3/s (0.923 m^3/s), 26.99 in/yr (686 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft^3/s (105 m^3/s) Nov. 8, 1977, gage height, 7.06 ft (2.152 m), from rating curve extended above 750 ft^3/s (212 m^3/s) by computation of peak flow over dam; minimum, 1.9 ft^3/s (0.054 m^3/s) Aug. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	1700	776	22.0	3.26	0.994
Apr. 9	2300	820	23.2	3.32	1.012
Apr. 28	2115	*881	24.9	3.40	1.036

Minimum discharge, 3.0 ft^3/s (0.085 m^3/s) July 13, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	19	30	25	15	18	128	80	33	29	13	11
2	52	20	30	25	13	18	76	74	50	18	25	13
3	66	94	25	23	13	17	63	67	52	18	18	9.0
4	41	46	24	22	15	17	133	61	33	17	13	8.9
5	85	29	24	23	12	17	84	52	25	21	14	9.0
6	97	25	27	22	12	17	59	50	24	65	16	9.5
7	40	23	43	21	12	17	52	47	32	22	13	8.9
8	34	23	31	21	12	19	50	91	31	19	13	8.9
9	30	24	27	20	12	27	376	53	34	26	13	8.6
10	62	31	25	20	12	23	292	45	36	21	11	8.6
11	54	41	24	66	12	68	117	44	26	15	11	8.4
12	41	69	27	117	11	26	92	54	24	7.1	12	8.6
13	37	35	49	38	11	21	79	77	22	8.8	11	9.0
14	31	35	43	32	11	33	97	49	21	14	11	8.6
15	27	30	30	31	10	29	112	39	21	14	11	8.8
16	25	28	28	28	13	26	72	38	21	14	11	8.8
17	24	28	36	29	15	41	63	39	19	14	9.5	13
18	24	29	26	29	15	130	58	38	19	14	9.7	43
19	23	23	24	50	15	53	56	38	20	13	10	19
20	22	23	24	37	14	40	52	35	22	12	11	15
21	24	26	24	27	14	291	50	55	18	13	10	12
22	22	23	25	25	16	263	47	45	17	11	10	10
23	20	23	28	26	22	102	44	35	17	24	10	11
24	20	22	35	23	28	76	42	32	16	15	9.2	9.0
25	19	20	96	22	26	128	41	31	22	13	9.3	9.1
26	18	165	52	22	23	76	41	28	18	12	9.0	10
27	19	89	34	21	21	64	44	26	15	12	8.7	10
28	28	41	30	22	19	56	332	24	15	12	8.6	9.4
29	29	38	28	21	19	88	248	24	15	24	8.5	9.3
30	22	32	27	20	---	98	110	23	46	16	8.7	8.9
31	21	---	26	18	---	128	---	27	---	14	8.4	---
TOTAL	1130	1154	1002	926	443	2027	3110	1421	764	547.9	356.6	336.3
MEAN	36.5	38.5	32.3	29.9	15.3	65.4	104	45.8	25.5	17.7	11.5	11.2
MAX	97	165	96	117	28	291	376	91	52	65	25	43
MIN	18	19	24	18	10	17	41	23	15	7.1	8.4	8.4
CFSM	2.23	2.35	1.97	1.82	.93	3.99	6.34	2.79	1.56	1.08	.70	.68
IN.	2.56	2.62	2.27	2.10	1.00	4.60	7.05	3.22	1.73	1.24	.81	.76

CAL YR 1979 TOTAL 16383.0 MEAN 44.9 MAX 431 MIN 13 CFSM 2.74 IN 37.16
WTR YR 1980 TOTAL 13217.8 MEAN 36.1 MAX 376 MIN 7.1 CFSM 2.20 IN 29.98

01391200 SADDLE RIVER AT FAIR LAWN, NJ

LOCATION.--Lat 40°56'30", long 74°05'36", Bergen County, Hydrologic Unit 02030103, at bridge on Century Road in Fair Lawn, and 0.8 mi (1.3 km) downstream from Hohokus Brook.

DRAINAGE AREA.--45.2 mi² (117.1 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 30...	1000	640	7.6	3.0	11.0	3.5	2	5	180	48
APR 10...	1230	212	7.5	12.5	10.0	3.8	540	1600	55	16
JUN 09...	1050	550	7.8	16.5	7.3	7.0	80	79	150	42
JUL 10...	0950	555	7.6	22.5	5.1	7.1	80	49	150	40
AUG 28...	1100	653	7.7	26.0	7.7	5.2	50	<2	180	46

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 30...	14	45	4.8	161	0	132	--	41	62	.1
APR 10...	3.7	14	1.7	51	0	42	--	16	22	.1
JUN 09...	12	36	4.1	161	0	132	.0	32	53	.1
JUL 10...	12	45	5.0	142	0	116	--	40	58	.1
AUG 28...	15	54	6.9	159	0	130	--	48	75	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 30...	15	340	6.2	2.620	.23	2.9	9.0	5.2	9.0
APR 10...	6.3	117	1.3	1.300	.10	1.4	2.7	.49	6.6
JUN 09...	14	315	2.6	4.300	1.3	5.6	8.2	4.3	9.3
JUL 10...	14	333	4.8	1.100	1.9	3.0	7.8	5.6	7.9
AUG 28...	8.7	378	5.8	2.000	2.4	4.4	10	8.7	10

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 09...	1050	30	2	0	140	0	<10	14

01391200 SADDLE RIVER AT FAIR LAWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
09...	400	4	180	.1	2	0	20	2

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, on left bank 560 ft (171 m) upstream from bridge on Outwater Lane in Lodi and 3.2 mi (5.1 km) upstream from mouth. Water-quality samples collected at bridge on Outwater Lane at high flows.

DRAINAGE AREA.--54.6 mi^2 (141.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1923 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1031: 1940(M). WSP 1552: 1929(M), 1936(M), 1938. WRD-NJ 1969: 1967. WRD-NJ 1970: 1968, 1969.

GAGE.--Water-stage recorder. Concrete control since Nov. 2, 1938. Datum of gage is 25.00 ft (7.620 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 2, 1938, at site 560 ft (171 m) downstream at datum 2.54 ft (0.774 m) lower.

REMARKS.--Water-discharge records good. Occasional regulation at low flow by mills above station. Diversion above station by Hackensack Water Co., for municipal supply (records given herein).

AVERAGE DISCHARGE.--57 years, 101 ft^3/s (2.860 m^3/s), 25.12 in/yr (638 mm/yr), adjusted for diversion since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Nov. 9, 1977, gage height, 12.36 ft (3.767 m), from high-water mark in gage house; minimum, 1.0 ft^3/s (0.028 m^3/s) May 25, 1938, gage height, 1.03 ft (0.314 m), site and datum then in use; minimum daily, 6.0 ft^3/s (0.17 m^3/s) Aug. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s), and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2315	1450	41.1	5.07	1.545	Apr. 10	0115	*2470	70.0	7.31	2.228
Mar. 22	0030	1840	52.1	5.80	1.768	Apr. 29	0215	2370	67.1	7.06	2.152

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 30, gage height, 1.61 ft (0.491 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	61	88	57	36	29	400	206	83	48	23	30
2	161	57	86	55	38	31	232	172	89	37	64	49
3	164	240	78	53	37	29	196	157	132	42	82	36
4	123	138	75	50	38	29	410	146	74	36	29	29
5	294	82	76	50	35	35	263	137	45	36	24	28
6	593	69	81	47	34	33	187	127	44	91	27	36
7	147	65	138	46	35	31	164	123	65	39	23	25
8	109	61	92	45	34	42	154	227	59	35	22	25
9	112	60	79	43	35	48	903	155	60	36	20	23
10	204	87	76	41	36	53	1370	139	74	33	20	20
11	172	98	72	118	35	204	341	132	48	31	21	19
12	126	194	71	352	35	59	263	167	43	23	19	19
13	117	97	130	99	33	38	230	222	41	20	17	18
14	98	101	127	76	33	92	265	158	47	25	23	19
15	88	79	87	68	34	77	300	127	44	23	25	19
16	82	71	81	60	50	58	211	116	44	24	29	16
17	78	68	102	57	42	75	185	113	39	21	26	19
18	76	68	77	75	35	270	176	110	38	20	25	100
19	74	65	73	118	36	110	166	114	38	19	26	27
20	72	60	72	98	37	86	158	107	40	16	26	20
21	70	60	70	64	43	671	152	145	39	20	26	18
22	72	63	73	58	56	1070	141	125	34	25	26	17
23	66	61	77	57	49	309	135	99	34	63	27	16
24	63	59	96	54	51	217	132	87	34	33	24	16
25	60	60	257	50	47	376	127	80	34	22	23	15
26	59	468	143	49	39	222	125	73	33	21	22	18
27	59	268	99	47	32	180	132	70	28	19	22	16
28	87	129	86	46	31	166	809	66	23	21	29	16
29	90	107	81	44	28	253	1050	62	24	80	29	16
30	66	96	79	41	---	299	271	55	118	32	28	14
31	63	---	73	39	---	365	---	48	---	22	27	---
TOTAL	3847	3192	2895	2157	1104	5557	9648	3865	1548	1013	854	739
MEAN	124	106	93.4	69.6	38.1	179	322	125	51.6	32.7	27.5	24.6
MAX	593	468	257	352	56	1070	1370	227	132	91	82	100
MIN	59	57	70	39	28	29	125	48	23	16	17	14
(†)	3.3	0	0.3	18.0	18.9	13.7	0	1.1	20.8	14.6	5.7	4.4
Mean‡	127	106	93.7	87.6	57.0	193	322	126	72.4	47.3	33.4	29.0
CFSM‡	2.33	1.95	1.72	1.60	1.04	3.53	5.89	2.30	1.33	0.87	0.61	0.53
IN‡	2.68	2.17	1.97	1.84	1.13	4.07	6.56	2.65	1.48	1.00	0.70	0.59

CAL YR 1979 TOTAL 49437 MEAN 135 MAX 2090 MIN 27 MEAN‡ 139 CFSM‡ 2.55 IN‡ 34.65
WTR YR 1980 TOTAL 36419 MEAN 99.5 MAX 1370 MIN 14 MEAN‡ 105 CFSM‡ 1.92 IN‡ 26.09

† Diversion, equivalent in cubic feet per second, above station by Hackensack Water Co. Records of diversion furnished by Hackensack Water Co.

‡ Adjusted for diversion.

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 02...	0915	162	292	7.5	17.0	7.6	7.0	5400	>2400	98
JAN 30...	1225	33	650	7.8	1.0	12.0	3.0	540	2	190
APR 01...	1350	418	312	7.6	9.0	11.2	2.8	110	34	90
JUN 03...	1210	238	278	7.5	21.5	6.0	>9.0	24000	>2400	75
JUL 15...	1145	17	670	7.8	23.5	6.1	6.2	28000	2300	200
AUG 14...	1200	18	653	7.8	22.5	4.7	8.1	1700	490	200

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 02...	28	6.7	17	2.5	88	0	72	.0	21	23
JAN 30...	52	14	44	4.4	181	0	148	--	40	62
APR 01...	25	6.8	21	1.9	80	0	66	--	21	35
JUN 03...	21	5.4	17	2.0	78	0	64	.0	20	24
JUL 15...	54	15	47	5.2	176	0	144	--	43	77
AUG 14...	53	16	49	5.4	178	0	146	--	44	77

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	.1	8.0	170	1.7	.500	1.1	1.7	3.3	1.1	7.0
JAN 30...	.1	15	348	4.7	2.710	.19	2.9	7.6	4.0	8.0
APR 01...	.1	8.4	187	2.0	--	--	1.1	3.1	.42	3.8
JUN 03...	.1	5.9	166	1.5	.990	1.8	2.8	4.3	1.8	16
JUL 15...	.1	13	410	3.5	2.200	1.9	4.1	7.6	5.1	7.3
AUG 14...	.1	15	406	3.9	1.900	1.3	3.2	7.1	5.6	4.3

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 02...	0915	30	2	10	70	1	10	12
JUN 03...	1210	0	4	0	70	1	10	27

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 02...	1400	24	140	<.5	3	0	30	1
JUN 03...	4200	330	340	.1	6	0	90	4

01392210 THIRD RIVER AT PASSAIC, NJ

LOCATION.--Lat 40°49'47", long 74°09'46", Passaic County, Hydrologic Unit 02030103, on right bank 400 ft (122 m) upstream from bridge on State Highway 3, 0.8 mi (1.3 km) south of Passaic, 1.2 mi (1.9 km) upstream from Passaic River.

DRAINAGE AREA.--11.8 mi^2 (30.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 22.15 ft (6.75 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. Some regulation from ponds upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft^3/s (65.1 m^3/s) Nov. 8, 1977, gage height, 8.25 ft (2.515 m), from rating curve extended above 300 ft^3/s) (8.50 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 3.4 ft^3/s (0.10 m^3/s) Sept. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (15.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	1920	674	19.1	4.82	1.469
Mar. 21	1645	558	15.8	4.52	1.378
Apr. 28	1620	*720	20.4	4.93	1.503
June 30	0040	642	18.2	4.74	1.445
Sept. 17	----	700	19.8	---	---

Minimum discharge, 3.5 ft^3/s (0.099 m^3/s) Aug. 10, 13, 14, 15, gage height, 1.77 ft (0.530 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	8.2	9.9	8.7	7.4	7.1	90	32	24	8.9	5.4	4.7
2	25	8.5	9.7	8.5	7.1	6.9	43	26	27	8.7	36	14
3	41	65	9.3	8.2	7.3	7.5	34	24	81	10	14	9.5
4	17	15	9.4	8.1	7.3	7.3	93	22	22	4.6	5.8	6.3
5	75	9.9	9.5	8.4	8.2	9.2	41	21	12	10	23	5.9
6	29	9.2	19	7.9	7.7	8.0	33	18	11	23	9.0	10
7	15	9.0	29	7.7	6.9	7.4	29	25	32	7.1	5.8	7.0
8	13	8.5	10	7.2	6.8	23	30	54	18	6.1	5.0	6.0
9	27	8.4	9.7	6.9	6.6	17	209	19	23	6.2	4.6	5.5
10	61	29	9.6	7.5	6.3	36	105	17	24	5.8	4.2	5.0
11	24	25	9.5	60	6.7	84	47	17	12	5.7	4.6	4.7
12	21	42	9.8	40	7.2	11	37	32	11	6.3	6.0	4.5
13	17	13	37	9.9	7.0	9.7	33	45	10	5.1	4.4	4.3
14	13	25	14	9.4	7.3	36	59	20	9.7	5.2	4.3	4.1
15	13	12	9.7	9.1	15	23	46	18	10	4.9	4.1	4.0
16	12	11	11	9.0	39	16	32	17	18	12	5.6	3.9
17	12	11	17	8.1	19	33	28	15	18	8.2	7.2	120
18	11	10	9.0	18	8.0	66	27	18	8.9	5.8	6.7	60
19	11	9.7	9.0	32	8.8	21	25	16	9.4	4.8	8.2	30
20	11	9.4	8.9	10	8.4	14	24	15	11	4.5	28	20
21	11	9.5	8.3	9.3	9.7	184	23	36	8.5	4.4	8.2	16
22	11	9.4	8.7	9.5	27	126	21	16	7.7	35	7.9	12
23	11	10	9.1	9.7	18	43	19	14	7.8	27	7.0	14
24	9.8	11	13	11	12	35	19	14	7.4	6.9	6.2	11
25	9.2	14	51	8.7	7.8	78	18	13	6.4	5.6	6.1	14
26	9.0	120	13	8.4	7.8	30	17	13	5.8	5.7	6.6	13
27	9.2	25	10	8.3	7.5	24	21	12	5.8	4.9	6.1	10
28	22	14	9.5	8.3	7.6	22	218	12	6.1	4.7	5.8	8.0
29	11	12	9.4	8.1	6.9	59	98	11	6.7	44	5.5	6.5
30	8.9	11	9.2	7.6	---	44	40	11	99	7.4	5.2	5.0
31	8.7	---	8.9	7.4	---	93	---	12	---	5.7	4.9	---
TOTAL	674.8	574.7	410.1	380.9	302.3	1181.1	1559	635	553.2	304.2	261.4	438.9
MEAN	21.8	19.2	13.2	12.3	10.4	38.1	52.0	20.5	18.4	9.81	8.43	14.6
MAX	106	120	51	60	39	184	218	54	99	44	36	120
MIN	8.7	8.2	8.3	6.9	6.3	6.9	17	11	5.8	4.4	4.1	3.9

CAL YR 1979 TOTAL 9356.3 MEAN 25.6 MAX 495 MIN 6.2
WTR YR 1980 TOTAL 7275.6 MEAN 19.9 MAX 218 MIN 3.9

RESERVOIRS IN PASSAIC RIVER BASIN

01379990 SPLITROCK RESERVOIR.--Lat 40°57'40", long 74°27'45", Morris County, Hydrologic Unit 02030103, at dam on Beaver Brook, 2 mi (3 km) northeast of Hibernia, NJ. DRAINAGE AREA, 5.50 mi^2 (14.2 km^2). PEPIOD OF RECORD, September 1925 to September 1931, December 1948 to September 1950, October 1953 to current year. Monthend contents only 1925-31, 1948-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a concrete gravity dam with earth embankment; present dam constructed 1946-48 and sluice gate first closed Dec. 22, 1948. Prior to 1946, reservoir was formed by earthfill dam with crest about 20 ft (6 m) lower. Capacity of spillway level, 3,310,000,000 gal (12.53 hm^3), elevation, 835 ft (254 m). Flow is regulated by two 30-inch (0.8 m) sluice gates. Flow is released for diversion for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 3,652,500,000 gal (13.82 hm^3) Apr. 5, 1973, elevation, 836.75 ft (255.04 m); minimum 1,522,800,000 gal (5.76 hm^3) Jan. 4, 1954, elevation, 824.20 ft (251.22 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 3,484,000,000 gal (13.19 hm^3) Apr. 10, elevation, 835.90 ft (254.78 m); minimum, 2,368,000,000 gal (8.96 hm^3) Sept. 30, elevation, 829.90 ft (252.95 m).

01380900 BOONTON RESERVOIR.--Lat 40°53'. long 74°24', Morris County, Hydrologic Unit 02030103, at dam on Rockaway River at Boonton, NJ. DRAINAGE AREA, 119 mi^2 (308 km^2). PERIOD OF RECORD, April 1904 to September 1950, October 1953 to current year. Monthend contents only 1904-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, hook gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a cyclopean masonry dam with earth wings; dam completed and storage began in 1904. Total capacity at spillway level, 7,620,000,000 gal (28.84 hm^3) elevation, 305.25 ft (93.040 m) of which 7,366,000,000 gal (27.88 hm^3) is usable contents above elevation 259.75 ft (79.172 m), sill of lowest outlet gate. Flow regulated by flashboards, 3 outlets in gatehouse at head of conduit and by two 48-inch (1.22 m) pipes (bottom of sluice pipes at elevation 205 ft or 62 m). Water is diverted from reservoir for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,273,000,000 gal (31.31 hm^3) Aug. 24, 1960, elevation, 307.76 ft (93.805 m); minimum, 1,792,000,000 gal (6.78 hm^3) Oct. 6, 1957, elevation 277.72 ft (84.649 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,041,000,000 gal (30.44 hm^3) Apr. 10, elevation, 306.87 ft (93.534 m); minimum, 2,721,000,000 gal (10.30 hm^3) Sept. 30, elevation, 283.57 ft (86.432 m).

01382100 CANISTEAR RESERVOIR.--Lat 41°06'30", long 74°29'30", Sussex County, Hydrologic Unit 02030103, at dam on Pacock Brook, 1.8 mi (2.9 km) northeast of Stockholm, NJ. DRAINAGE AREA, 5.6 mi^2 (14.5 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, stage gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earth-embankment type dam, completed about 1896. Capacity at spillway level, 2,407,000,000 gal (9.110 hm^3), elevation, 1,086.0 ft (331 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply for City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by City of Newark, Division of Water Supply.

01382200 OAK RIDGE RESERVOIR.--Lat 41°02'30", long 74°30'10", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 0.9 mi (1.4 km) southwest of Oak Ridge, NJ. DRAINAGE AREA, 27.3 mi^2 (70.7 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1924-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with concrete-core wall and ogee overflow section; dam constructed between 1880-92; dam raised 10 ft (3 m) during 1917-19. Capacity at spillway level, 3,895,000,000 gal (14.74 hm^3), elevation, 846.0 ft (257.86 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by City of Newark, Division of Water Supply.

01382300 CLINTON RESERVOIR.--Lat 41°04'30", long 74°27'00", Passaic County, Hydrologic Unit 02030103, at dam on Clinton Brook, 2.0 mi (3 km) north of Newfoundland, NJ. DRAINAGE AREA, 10.5 mi^2 (27.2 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam constructed between 1889-92. Capacity at spillway level, 3,518,000,000 gal (13.32 hm^3), elevation, 992.0 ft (302.36 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir since May 21, 1961, for municipal supply of City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by City of Newark, Division of Water Supply.

01382380 CHARLOTTEBURG RESERVOIR.--Lat 41°01'34", long 74°25'30", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 1.1 mi (1.8 km) upstream from Macopin River, and 1.5 mi (2.4 km) southeast of Newfoundland, NJ. DRAINAGE AREA, 56.2 mi^2 (145.6 km^2). PERIOD OF RECORD, May 1961 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete-masonry dam and earth embankment, with concrete spillway at elevation 738.00 ft (224.942 m); storage began May 19, 1961. Spillway equipped with Bascule gate 5 ft (1.5 m) high. Capacity, 2,964,000,000 gal (11.22 hm^3), elevation, 743.00 ft (226.466 m), top to Bascule gate. No dead storage. Outflow is controlled by sluice and automatic Bascule gates. Water diverted from reservoir since May 21, 1961, for municipal supply of City of Newark. Records furnished by City of Newark, Division of Water Supply.

REVISION.--WRD-NJ 1974: Station number.

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

01382400 ECHO LAKE.--Lat 41°03'00", long 74°24'30", Passaic County, Hydrologic Unit 02030103, at Echo Lake Dam on Macopin River, 1.6 mi (2.6 km) north of Charlotteburg, NJ, and 1.9 mi (3.1 km) upstream from mouth. DRAINAGE AREA, 4.35 mi² (11.27 km²). PERIOD OF RECORD, October 1927 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake is formed by earth-embankment type dam completed about 1925. Capacity at spillway level, 1,583,000,000 gal (5.99 hm³), elevation, 893.0 ft (272.19 m), with provision for additional storage of 180,000,000 gal (0.681 hm³) at elevation 894.9 ft (272.77 m) with flashboards. Usable contents, 1,045,000,000 gal (3.96 hm³) above elevation 880.0 ft (268.22 m). Lake used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and water diverted to Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of City of Newark. Outflow to Macopin River controlled by operation of gates in gatehouse at dam and water released through pipe and canal to Charlotteburg Reservoir. Records furnished by City of Newark, Division of Water Supply.

01383000 GREENWOOD LAKE.--Lat 41°09'36", long 74°20'03", Passaic County, Hydrologic Unit 02030103, in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting. DRAINAGE AREA, 27.1 mi² (7.02 mi²). PERIOD OF RECORD, June 1898 to November 1903, June 1907 to current year (gage heights only prior to October 1953). GAGE, water-stage recorder. Datum of gage is 608.86 ft (185.58 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Oct. 1, 1931, staff gage on former railroad bridge at site 100 ft (30 m) upstream at datum 89.75 ft (27.36 m) lower.

Reservoir is formed by earthfill dam with concrete spillway; dam completed about 1837 and reconstruction completed in 1928 with crest of spillway 0.25 ft (0.08 m) lower. Usable capacity, 6,860,000,000 gal (25.96 hm³) between gage heights -4.00 ft (-1.22 m), sill of gate, and 10.00 ft (3.0 m), crest of spillway. Dead storage, 7,140,000,000 gal (27.02 hm³). Outflow mostly regulated by two gates, 3.5 by 5.0 ft (1.1 m by 1.5 m). Records given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 9,528,000,000 gal (36.07 hm³) Oct. 9-14, 1903, gage height, 14.25 ft (4.343 m), present datum; minimum, 3,160,000,000 gal (11.96 hm³) several days in November 1900, gage height, 3.50 ft (1.067 m), present datum.

EXTREMES FOR CURRENT YEAR: Maximum contents, 7,663,000,000 gal (29.004 hm³) Apr. 10, gage height, 11.29 ft (3.441 m); minimum, 6,421,000,000 gal (24.30 hm³) Sept. 30, gage height, 9.28 ft (2.83 m).

01386990 WANAQUE RESERVOIR.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, at Raymond Dam on Wanaque River at Wanaque. DRAINAGE AREA, 90.4 mi² (234.1 km²). PERIOD OF RECORD, February 1928 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by North Jersey District Water Supply Commission).

Reservoir is formed by earthfill with concrete-core wall main dam and seven secondary dams; dams completed in 1927 and storage began in March 1928. Total capacity of spillway level, 28,010,000,000 gal (106.02 hm³) elevation, 300.3 ft (91.5 m). Capacity available by gravity at spillway level, 26,230,000,000 gal (99.28 hm³). Outflow mostly controlled by sluice gates in intake conduits in gage house. Water is diverted from reservoir for municipal supply. Diversion to reservoir from Post Brook and Ramapo River (see Passaic River Basin, diversions). Records furnished by North Jersey District Water Supply Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 30,814,000,000 gal (1,166.63 hm³) Mar. 31, 1951, elevation, 303.93 ft (92.638 m); minimum, 5,110,000,000 gal (19.34 hm³) Dec. 26, 1964, elevation, 256.06 ft (78.047 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 30,640,000,000 gal (115.97 hm³) Apr. 10, elevation, 303.70 ft (92.568 m); minimum, 14,285,000,000 gal (54.07 hm³) Sept. 30, elevation, 278.63 ft (84.926 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01379990	SPLITROCK RESERVOIR *		01380900	BOONTON RESERVOIR *		01382100	CANISTEAR RESERVOIR †	
Sept. 30	835.20	3,346	-	306.52	7,950	-	1,086.10	2,417	-
Oct. 31	835.15	3,336	-0.5	305.42	7,664	-14.3	1,086.10	2,417	0
Nov. 30	835.40	3,385	+2.5	305.79	7,760	+5.0	1,086.20	2,427	+.5
Dec. 31	835.05	3,316	-3.4	305.45	7,672	-4.4	1,086.10	2,417	-.5
CAL YR 1979	-	-	+4.5	-	-	+5.7	-	-	+8.8
Jan. 31	835.05	3,316	0	305.29	7,630	-2.1	1,086.10	2,417	0
Feb. 29	835.05	3,316	0	305.29	7,630	0	1,086.10	2,417	0
Mar. 31	835.60	3,385	+3.4	305.97	7,807	+8.8	1,086.30	2,437	+1.0
Apr. 30	835.70	3,444	+3.0	306.54	7,955	+7.6	1,086.30	2,437	0
May 31	835.00	3,306	-6.9	305.17	7,599	-17.8	1,086.10	2,417	-1.0
June 30	834.80	3,266	-2.1	303.25	7,101	-25.7	1,086.10	2,417	0
July 31	834.60	3,226	-2.1	297.61	5,706	-69.6	1,086.00	2,407	-.5
Aug. 31	832.60	2,838	-19.4	291.31	4,283	-71.0	1,085.90	2,396	-.5
Sept. 30	829.90	2,368	-24.2	283.57	2,721	-80.5	1,083.50	2,151	-12.6
WTR YR 1980	-	-	-4.1	-	-	-22.1	-	-	-1.1

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01382200	OAK RIDGE RESERVOIR †		01382300	CLINTON RESERVOIR †		01382380	CHARLOTTEBURG RESERVOIR †	
Sept. 30	831.10	1,969	-	985.70	2,692	-	733.30	1,952	-
Oct. 31	835.60	2,504	+26.7	986.30	2,768	+3.8	732.35	1,868	-4.2
Nov. 30	840.80	3,177	+34.7	990.10	3,275	+26.1	735.50	2,158	+15.0
Dec. 31	844.40	3,669	+24.6	990.00	3,262	-.6	732.90	1,916	-12.1
CAL YR 1979	-	-	+10.6	-	-	+8.4	-	-	+.5
Jan. 31	841.60	3,285	-20.0	990.70	3,352	+4.5	732.30	1,863	-2.6
Feb. 29	836.50	2,618	-35.6	985.80	2,704	-34.6	730.90	1,742	-6.5
Mar. 31	846.40	3,953	+66.6	992.40	3,569	+43.2	743.25	2,996	+62.6
Apr. 30	846.30	3,938	-.8	992.40	3,569	0	743.30	3,002	+.3
May 31	846.10	3,909	-1.4	992.00	3,518	-2.5	737.05	2,308	-34.6
June 30	838.50	2,875	-53.3	989.90	3,249	-13.9	732.40	1,872	-22.5
July 31	830.60	1,913	-48.0	982.30	2,302	-47.3	732.30	1,864	-.4
Aug. 31	813.40	509	-70.1	979.10	1,964	-16.9	730.40	1,700	-8.2
Sept. 30	802.60	131	-19.5	969.90	1,100	-44.6	728.20	1,516	-9.5
WTR YR 1980	-	-	-7.8	-	-	-6.7	-	-	-.8

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Gage height	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01382400	ECHO LAKE †		01383000	GREENWOOD LAKE **		01386990	WANAQUE RESERVOIR †	
Sept. 30	891.20	1,423	-	10.25	7,015	-	297.65	26,045	-
Oct. 31	888.50	1,193	-11.5	10.15	6,953	-3.1	298.82	26,886	+42.0
Nov. 30	887.20	1,088	-5.4	10.53	7,189	+12.2	301.21	28,708	+94.0
Dec. 31	888.40	1,184	+4.8	10.28	7,034	-7.7	301.90	29,240	+26.5
CAL YR 1979	-	-	+1.6	-	-	+0.3	-	-	+67.3
Jan. 31	889.40	1,268	+4.2	10.10	6,922	-5.6	301.44	28,892	-17.4
Feb. 29	889.50	1,276	+.4	10.06	6,897	-1.3	298.24	26,468	-129.3
Mar. 31	893.30	1,611	-16.7	10.72	7,306	+20.4	302.83	29,961	+174.3
Apr. 30	893.40	1,622	+.6	10.72	7,306	0	303.10	30,170	+10.8
May 31	892.90	1,574	-2.4	10.03	6,879	-21.3	301.15	28,665	-75.1
June 30	892.00	1,493	-4.2	10.10	6,922	+2.2	297.13	25,671	-154.4
July 31	888.80	1,218	-13.7	9.96	6,836	-4.3	292.17	22,242	-171.1
Aug. 31	886.00	992	-11.3	9.58	6,604	-11.6	285.72	18,180	-202.7
Sept. 30	883.40	788	-10.5	9.28	6,421	-9.4	278.63	14,285	-200.8
WTR YR 1980	-	-	-2.7	-	-	-2.5	-	-	-49.7

* Elevation at 0900.

** Gage height at 2400.

† Elevation at 0800 on first day of following month.

DIVERSIONS IN PASSAIC RIVER BASIN

01379510 Commonwealth Water Company diverts water from Passaic River, 1.2 mi (1.9 km) upstream from Canoe Brook for municipal supply. These figures also include water diverted from the Passaic River by the Bernards Division of the Commonwealth Water Company. Records furnished by Commonwealth Water Company.

01379530 Commonwealth Water Company diverts water from Canoe Brook near Summit, 0.5 mi (0.8 km) from mouth, for municipal supply. Records furnished by Commonwealth Water Company.

01380800 Jersey City diverts water from Boonton Reservoir on Rockaway River at Boonton for municipal supply. Records furnished by Jersey City, Bureau of Water.

01382370 City of Newark diverts water from Charlotteburg Reservoir on Pequannock River since May 21, 1961 for municipal supply. Prior to May 21, 1961 water was diverted from reservoir formed by Macopin intake dam on Pequannock River (former diversion 01382490). Records furnished by City of Newark, Division of Water Supply.
CORRECTION.--The station number for the diversion from Charlotteburg Reservoir has been corrected to 01382370.

01386980 North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir on Wanaque River. Records furnished by North Jersey District Water Supply Commission.

01387020 North Jersey District Water Supply Commission diverts water from Post Brook near Wanaque into Wanaque Reservoir. Records no longer available.

01387990 North Jersey District Water Supply Commission diverts water from Ramapo River by pumping from Pompton Lakes into Wanaque Reservoir. Records furnished by North Jersey District Water Supply Commission.

01388490 Passaic Valley Water Commission supplements the dependable yield of its supply at Little Falls by diverting water at high flows at the Jackson Avenue Pumping Station into Point View Reservoir on Haycock Brook for release as required to sustain minimum flow requirements. Also water may be released into Haycock Brook for maintenance of flow in that stream. These diversions and releases occur upstream of Pompton Plains gaging station. Records furnished by Passaic Valley Water Commission. No diversion or release during the year.
CORRECTION.--The station number for diversions to and releases from Point View Reservoir at the Jackson Avenue Pumping station on the Pompton River has been changed to differentiate it from the gaging station at Jackson Avenue.

01389490 The Passaic Valley Water Commission diverts water from Passaic River above Beattie's Dam at Little Falls for municipal supply. Records furnished by Passaic Valley Water Commission.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	COMMONWEALTH WATER COMPANY FROM PASSAIC RIVER 01379510	COMMONWEALTH WATER COMPANY FROM CANOE BROOK 01379530	JERSEY CITY 01380800	NEWARK 01382370	FROM WANAQUE RESERVOIR 01386980	FROM RAMAPO RIVER TO WANAQUE RESERVOIR 01387990	PASSAIC VALLEY WATER COMMISSION 01389490
October......	43.1	4.86	96.2	127	146	0	94.1
November.....	48.1	2.19	90.1	128	154	0	70.7
December.....	44.4	1.75	89.0	119	156	0	57.9
CAL YR 1979..	23.0	4.58	94.9	125	169	11.6	80.8
January......	36.8	1.82	92.1	130	156	0	62.4
February.....	3.31	0	89.3	120	167	0	75.1
March........	60.8	12.7	93.4	110	167	0	74.8
April........	16.5	11.2	91.8	127	125	0	88.1
May..........	18.6	1.05	90.0	119	142	0	90.8
June.........	2.38	1.75	89.8	139	174	0	93.8
July.........	2.60	0.86	93.3	139	186	0	92.7
August.......	2.07	.45	89.3	118	191	0	93.8
September....	15.0	1.71	96.7	103	198	1.15	93.6
WTR YR 1980..	24.6	3.38	91.8	123	164	.1	82.3

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ

LOCATION.--Lat 40°40'30", long 74°13'20", Union County, Hydrologic Unit 02030104, on left bank at Ursino Lake Dam in Elizabeth, 75 ft (23 m) upstream of bridge on Trotters Lane and 3.8 mi (6.1 km) upstream from mouth.

DRAINAGE AREA.--16.9 mi^2 (43.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1552: Drainage area, 1922-23, 1927-29(M), 1932, 1933-34(M), 1938(P), 1942(M) 1944(P), 1945(M), 1948(P), 1952-53(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1922, nonrecording gage at site 2,800 ft (850 m) downstream at datum 4.14 ft (1.262 m) higher and Oct. 1, 1922 to May 18, 1923, at same site at datum 5.23 ft (1.594 m) higher. May 19, 1923 to Dec. 27, 1972, at site 2,800 ft (850 m) downstream at datum 5.23 ft (1.594 m) higher and published as "Elizabeth River at Elizabeth" (station 01393500).

REMARKS.--Water-discharge records good. Diversion by pumpage from Hammock Well Field in Union, for municipal supply by Elizabethtown Water Co., probably reduces the flow past the station.

AVERAGE DISCHARGE.--59 years, 25.8 ft^3/s (0.731 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,110 ft^3/s (116 m^3/s) Aug. 28, 1971, gage height, 18.7 ft (5.70 m) from floodmark, site and datum then in use, from rating curve extended above 1,100 ft^3/s (31.2 m^3/s) on basis of contracted-opening measurement of peak flow; no flow many times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Elevation (ft)	Elevation (m)
Oct. 1	1815	1620	45.9	21.35	6.507
Apr. 28	1600	*2080	58.9	22.57	6.879

Minimum discharge, 0.31 ft^3/s (0.009 m^3/s) Mar. 1, elevation, 12.85 ft (6.776 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	8.9	8.7	6.7	7.5	5.4	174	27	21	14	8.4	5.9
2	42	8.9	7.5	7.4	6.0	4.4	44	19	11	11	30	17
3	87	129	8.4	7.6	6.0	5.4	25	16	141	20	13	13
4	20	13	8.9	7.4	6.9	5.7	145	15	17	7.7	9.3	6.2
5	73	9.5	8.6	8.0	7.1	11	30	15	11	17	9.1	6.3
6	23	9.3	39	6.9	7.0	6.7	19	15	11	38	8.3	4.8
7	16	8.8	37	7.6	7.0	6.0	17	32	83	8.2	8.0	3.7
8	12	8.7	10	7.6	7.3	55	16	91	32	7.7	7.9	4.7
9	53	8.3	7.4	7.6	6.2	19	410	18	46	7.5	6.4	5.0
10	128	47	8.0	7.5	5.4	86	125	13	23	7.5	5.2	5.1
11	28	55	8.6	103	6.2	140	35	12	11	7.4	9.0	5.2
12	35	64	8.7	62	6.6	17	22	86	10	6.3	32	5.7
13	16	14	65	12	6.3	12	17	58	10	5.6	7.5	4.2
14	11	32	14	10	6.6	58	97	20	9.1	7.0	6.8	5.2
15	12	11	9.1	9.5	6.3	36	35	15	9.0	7.9	8.6	11
16	11	9.8	9.0	8.6	61	19	20	14	11	11	5.8	5.2
17	11	8.8	27	8.6	10	40	17	11	9.4	9.9	4.6	11
18	11	7.7	9.3	35	6.5	79	16	20	9.2	8.3	5.1	257
19	10	8.3	8.9	46	7.1	19	14	14	9.2	6.7	7.8	20
20	9.3	8.8	9.4	9.5	6.9	14	13	14	9.5	6.7	6.2	8.9
21	8.2	8.3	8.6	9.1	6.8	328	14	60	7.8	10	5.8	5.8
22	9.4	7.2	10	12	40	159	15	16	6.9	52	6.0	6.5
23	9.3	7.1	8.7	10	16	36	15	13	8.1	32	5.4	6.4
24	9.8	6.8	20	8.7	8.3	38	14	11	8.6	9.9	4.7	5.5
25	9.2	9.4	88	8.5	7.2	157	14	10	9.5	8.2	5.4	6.6
26	8.7	174	14	7.4	6.7	26	12	9.3	9.2	7.2	5.9	17
27	8.2	27	11	6.5	6.4	19	15	11	9.6	10	6.0	4.8
28	30	14	9.2	7.4	6.4	16	560	11	7.8	6.8	6.1	3.7
29	10	11	8.7	7.6	6.0	119	132	11	7.0	116	6.0	4.4
30	9.1	9.7	7.5	7.5	---	35	36	10	129	14	4.7	5.2
31	8.7	---	7.1	7.5	---	301	---	16	---	9.0	7.7	---
TOTAL	1004.9	745.3	505.3	470.7	293.7	1872.6	2118	703.3	696.9	490.5	262.7	471.0
MEAN	32.4	24.8	16.3	15.2	10.1	60.4	70.6	22.7	23.2	15.8	8.47	15.7
MAX	276	174	88	103	61	328	560	91	141	116	32	257
MIN	8.2	6.8	7.1	6.5	5.4	4.4	12	9.3	6.9	5.6	4.6	3.7

CAL YR 1979 TOTAL 12842.1 MEAN 35.2 MAX 867 MIN 6.8
WTR YR 1980 TOTAL 9634.9 MEAN 26.3 MAX 560 MIN 3.7

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 02...	1230	39	290	7.3	19.0	7.3	--	>2400	>2400	100
FEB 25...	1115	7.9	720	7.9	6.5	10.8	3.0	790	230	190
MAR 18...	0915	135	215	7.1	9.5	10.2	5.7	16000	240	49
MAY 28...	1145	11	645	8.8	18.5	17.4	2.8	80	230	220
JUL 14...	1100	5.9	655	8.4	24.0	12.8	1.9	24000	800	220
AUG 26...	1045	4.9	691	8.2	24.0	13.2	2.5	500	7900	270

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 02...	32	5.0	15	2.2	71	0	58	.0	39	19
FEB 25...	61	9.6	61	2.9	166	0	136	--	52	110
MAR 18...	16	2.2	21	1.3	44	0	36	--	16	27
MAY 28...	67	12	44	2.1	137	6	112	.0	65	78
JUL 14...	69	12	36	3.1	163	1	134	--	60	73
AUG 26...	82	17	33	2.3	161	0	132	--	69	95

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	.1	9.4	177	1.0	.300	1.0	1.3	2.3	.31	13
FEB 25...	.1	12	414	--	--	--	.72	--	.33	7.1
MAR 18...	.1	4.6	118	.88	.090	.75	.84	1.7	.36	9.2
MAY 28...	.1	15	429	2.8	.120	.08	.20	3.0	.40	2.1
JUL 14...	.1	15	453	2.5	.120	.78	.90	3.4	.37	3.3
AUG 26...	--	16	512	1.1	.090	.62	.71	1.8	--	4.5

DATE	TIME	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 02...	1230	1100	.5	4.1	50	2	0	0	70	4	<10
MAY 28...	1145	--	--	--	10	1	--	0	130	2	--

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 02...	10	50	10	61	80	1200	7900	26	210	170
MAY 28...	20	--	--	83	--	380	--	4	--	100

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 02...	80	<.5	.00	50	60	0	0	210	290	0
MAY 28...	--	.1	--	54	--	1	--	120	--	5

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 02...	41	.0	20	6.7	1.1	7.9	.0	.4	.0	.0
MAY 28...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 02...	.0	1.3	.0	.0	.0	.0	.0	.0	0	.0
MAY 28...	--	--	--	--	--	--	--	--	--	--

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from bridge on U.S. Highway 22, 100 ft (30 m) downstream from Pope Brook, and 1.5 mi (2.4 m) south of Springfield.

DRAINAGE AREA.--25.5 mi² (66.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1622: 1945. WRD-NJ 1973: 1938(M), 1968(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 66.17 ft (20.169 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Water for municipal supply diverted from river by city of Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--42 years, 28.5 ft³/s (0.807 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft³/s (154 m³/s) Aug. 2, 1973, gage height, 9.76 ft (2.975 m) from floodmark, from rating curve extended above 1,600 ft³/s (35.2 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft³/s (0.003 m³/s) Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 21	1730	*1250	35.4	6.10	1.859

Minimum discharge, 2.2 ft³/s (0.062 m³/s) Sept. 7, 8, 9, 10, 27, 28, 29, gage height, 1.18 ft (0.360 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	7.8	9.3	11	5.0	5.6	230	45	24	7.5	4.9	7.6
2	75	8.2	8.6	15	5.2	6.3	89	34	11	6.5	34	6.3
3	55	67	8.1	13	4.9	7.1	46	28	86	14	11	10
4	23	8.6	8.7	11	5.1	8.2	166	25	27	6.8	4.9	2.8
5	46	9.8	8.8	10	4.7	9.7	65	22	11	13	8.5	3.1
6	39	7.2	21	9.9	4.5	12	35	20	9.8	36	7.3	3.1
7	14	6.8	46	9.3	4.3	13	27	32	54	6.3	4.0	2.7
8	12	6.4	12	10	4.2	13	24	100	22	6.0	3.8	2.6
9	31	6.4	9.1	8.2	4.6	57	487	29	34	6.1	3.7	2.6
10	123	39	8.3	6.0	4.4	41	333	21	33	6.1	3.4	2.7
11	47	29	8.2	56	4.3	453	66	19	11	6.7	4.6	2.7
12	35	80	8.2	97	4.6	123	42	65	9.2	6.0	15	2.8
13	25	18	46	18	4.4	34	33	68	8.9	5.6	4.2	3.1
14	14	32	24	12	4.2	55	80	30	8.4	5.1	3.8	3.9
15	11	14	12	12	5.1	93	66	19	8.7	4.7	4.9	7.5
16	10	11	10	11	35	70	33	16	9.6	5.6	5.0	3.0
17	9.6	9.8	23	9.9	9.0	78	26	15	8.0	7.8	4.0	11
18	10	9.2	9.8	19	5.7	172	22	20	7.9	5.6	4.0	201
19	9.1	9.0	8.6	53	5.9	40	20	18	7.7	4.6	5.3	5.4
20	8.9	8.9	8.5	16	6.3	26	19	15	6.7	5.5	4.7	4.1
21	8.4	8.3	8.0	11	6.5	492	21	48	7.3	4.6	4.7	3.8
22	8.9	7.9	8.8	10	26	361	23	19	7.3	27	4.4	3.5
23	9.5	8.7	9.1	9.3	23	87	23	14	7.2	38	4.2	3.2
24	11	7.4	16	9.1	9.3	52	21	12	7.4	6.1	3.7	2.7
25	10	7.1	348	8.4	7.1	199	20	12	7.3	4.8	4.0	3.6
26	10	197	144	7.8	6.9	49	19	11	6.8	4.3	3.9	6.2
27	10	57	54	7.3	6.6	31	25	10	7.4	8.1	3.5	2.5
28	21	19	22	6.7	6.4	24	460	9.8	7.2	4.6	3.5	2.2
29	9.3	14	17	6.3	6.3	112	218	9.4	8.3	60	3.5	2.5
30	8.3	11	13	5.8	---	83	68	9.2	117	7.0	3.5	2.9
31	8.6	---	12	5.4	---	277	---	13	---	4.7	5.1	---
TOTAL	908.6	725.5	950.1	494.4	229.5	3083.9	2807	808.4	581.1	334.7	185.0	321.1
MEAN	29.3	24.2	30.6	15.9	7.91	99.5	93.6	26.1	19.4	10.8	5.97	10.7
MAX	196	197	348	97	35	492	487	100	117	60	34	201
MIN	8.3	6.4	8.0	5.4	4.2	5.6	19	9.2	6.7	4.3	3.4	2.2

CAL YR 1979 TOTAL 15627.6 MEAN 42.8 MAX 1010 MIN 4.1
WTR YR 1980 TOTAL 11429.3 MEAN 31.2 MAX 492 MIN 2.2

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1040	44	228	7.1	9.5	10.9	2.0	--	--	77
JAN 31...	1015	5.4	540	7.9	1.0	14.0	1.2	330	<20	180
MAR 18...	1225	181	365	7.3	6.5	11.8	4.2	>2400	>2400	65
MAY 28...	0930	9.9	500	7.6	15.5	6.2	1.6	400	790	160
JUL 14...	1255	5.0	515	7.9	22.5	7.2	2.6	800	200	170
AUG 26...	1245	4.1	514	7.8	22.5	9.8	2.0	<200	<200	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 11...	22	5.3	17	1.7	56	0	46	.0	22	27
JAN 31...	55	11	33	1.5	122	0	100	--	39	69
MAR 18...	18	4.8	41	1.5	39	0	32	--	20	71
MAY 28...	49	10	31	1.6	122	0	100	.0	40	62
JUL 14...	51	9.7	29	2.1	124	0	102	--	40	65
AUG 26...	56	11	29	1.9	129	0	106	--	43	62

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	.1	11	--	--	--	--	--	--	--	5.2
JAN 31...	.1	15	302	1.9	<.030	--	<.03	--	.29	5.5
MAR 18...	.1	5.9	207	1.0	.070	.47	.54	1.5	.62	7.1
MAY 28...	.1	14	323	1.6	.150	.42	.57	2.2	.47	2.1
JUL 14...	.1	10	326	.94	.120	.50	.62	1.6	.21	2.7
AUG 26...	.1	9.6	338	.80	.120	.58	.70	1.5	.33	3.0

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 11...	1040	1000	.0	4.1	60	2	0	10	50	1	<10
MAY 28...	0930	--	--	--	0	2	--	0	60	0	--

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
11...	20	10	<10	11	10	560	4000	16	80	50
MAY										
28...	10	--	--	5	--	380	--	5	--	110

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
11...	100	.2	.00	6	20	0	0	30	50	4
MAY										
28...	--	.1	--	2	--	0	--	10	--	3

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	0	.0	28	3.3	1.9	11	.0	.9	.0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'05", long 74°17'00", Union County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from St. Georges Avenue bridge in Rahway and 0.9 mi (1.4 km) upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi^2 (105.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1908 to April 1915 (gage heights and discharge measurements only), October 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1930-31(M), 1937. WDR NJ-79-1: 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft (2.673 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 25, 1934, nonrecording gage at site 40 ft (12 m) downstream from Church Street and 1,500 ft (460 m) downstream from present site at datum 2.77 ft (0.844 m) lower.

REMARKS.--Water-discharge records fair. Water for municipal supply diverted from river by Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--59 years (water years 1922-80), 47.1 ft^3/s (1.331 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,420 ft^3/s (153 m^3/s) Aug. 2, 1973, gage height, 7.88 ft (2.402 m), from rating curve extended above 3,000 ft^3/s (85 m^3/s); no flow part or all of some days in many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1700	703	19.9	3.27	0.997	Apr. 28	1445	*1860	52.7	4.82	1.469
Mar. 22	0145	1560	44.2	4.48	1.366	July 6	0045	623	17.6	3.21	0.978
Apr. 1	0300	882	25.0	3.56	1.085	Sept. 18	0430	750	21.2	3.35	1.021
Apr. 9	2345	1850	52.4	4.81	1.466						

No flow Aug. 28, Sept. 9-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	9.3	16	10	8.1	5.1	641	74	28	29	5.1	.01
2	271	7.8	15	12	7.8	5.3	199	51	14	11	44	.13
3	90	112	12	10	7.5	5.9	84	39	71	7.2	55	6.3
4	57	44	21	9.8	6.8	6.6	296	34	69	2.6	17	.90
5	44	15	24	10	7.5	10	144	29	20	37	17	.31
6	108	15	2.9	9.8	7.6	11	62	28	7.7	152	12	.27
7	28	12	97	8.2	6.6	11	47	33	69	24	4.9	.18
8	19	11	24	9.0	5.8	26	41	170	32	3.9	2.7	.22
9	24	10	16	7.3	7.0	83	538	48	29	.38	1.6	.00
10	197	58	12	6.1	6.8	26	1090	30	72	.76	5.6	.00
11	159	38	12	34	5.8	377	131	26	19	3.3	20	.00
12	49	160	13	234	6.7	55	74	102	12	3.3	30	.00
13	59	48	59	46	6.5	23	58	135	10	1.6	10	.00
14	27	55	69	22	7.1	55	105	49	10	.94	1.7	.00
15	19	28	24	20	26	75	145	29	9.3	1.4	5.0	1.6
16	22	19	17	20	48	53	61	21	9.3	16	3.0	.79
17	15	15	38	24	52	63	44	20	10	3.2	1.0	1.7
18	14	14	19	15	12	390	39	26	9.3	8.7	.60	361
19	14	13	15	108	9.9	98	36	27	8.0	5.8	.40	25
20	12	24	13	35	8.7	47	33	22	7.9	4.6	.20	7.0
21	11	28	13	22	2.2	474	32	76	6.0	3.5	.01	3.1
22	9.5	12	14	20	9.4	1050	27	34	12	12	.01	1.1
23	8.4	9.6	17	22	56	284	25	22	7.9	107	.15	1.3
24	13	2.0	21	15	25	86	23	22	6.4	12	.19	.53
25	11	.63	150	13	14	401	23	14	21	5.5	.20	2.7
26	8.3	154	98	13	12	111	22	13	5.0	3.5	.01	13
27	10	224	28	11	8.7	59	26	11	2.9	3.0	.11	3.1
28	22	51	20	11	8.5	42	806	6.2	1.7	3.8	.00	.37
29	27	23	17	11	7.7	170	742	10	.84	151	.08	.19
30	11	21	13	9.7	---	204	110	12	327	24	.01	.08
31	9.7	---	10	9.2	---	458	---	16	---	6.6	.15	---
TOTAL	1693.9	1233.33	919.9	807.1	397.7	4764.9	5704	1229.2	907.24	648.58	237.72	430.88
MEAN	54.6	41.1	29.7	26.0	13.7	154	190	39.7	30.2	20.9	7.67	14.4
MAX	325	224	150	234	56	1050	1090	170	327	152	55	361
MIN	8.3	.63	2.9	6.1	2.2	5.1	22	6.2	.84	.38	.00	.00

CAL YR 1979 TOTAL 26305.73 MEAN 72.1 MAX 1700 MIN .63
WTR YR 1980 TOTAL 18974.45 MEAN 51.8 MAX 1090 MIN .00

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1952, 1962, 1967-70, and February 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 01...	1035	29	262	7.5	18.5	8.6	2.8	5400	5400	93
FEB 06...	0925	7.6	545	8.1	1.5	14.7	1.8	49	34	200
MAR 24...	1040	87	315	7.2	8.0	11.8	2.3	>2400	920	78
MAY 21...	0930	78	410	7.8	18.5	8.3	4.3	4600	9200	130
JUL 24...	0930	8.2	298	7.6	24.5	6.4	3.9	1700	200	110
AUG 20...	1030	.48	427	7.7	22.0	6.0	3.3	200	500	170

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 01...	29	5.0	12	2.0	73	0	60	.0	24	24
FEB 06...	59	12	27	1.5	149	0	122	--	54	53
MAR 24...	23	5.1	28	1.6	51	0	42	--	26	43
MAY 21...	38	8.4	25	1.8	105	0	86	.0	39	40
JUL 24...	33	5.9	14	2.4	78	0	64	--	32	26
AUG 20...	52	9.4	19	2.0	129	0	106	--	48	40

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	.1	7.7	158	.87	.200	.28	.48	1.4	.14	4.6
FEB 06...	.1	12	317	--	.060	.21	.27	--	<.01	3.8
MAR 24...	.1	9.8	201	1.5	.220	3.2	3.4	4.9	.20	5.2
MAY 21...	.1	11	231	1.0	.100	.85	.95	2.0	.29	4.3
JUL 24...	.1	7.2	194	.80	.390	.81	1.2	2.0	.37	9.2
AUG 20...	.2	11	288	.45	.090	.78	.87	1.3	.24	3.3

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 01...	1035	1200	.2	8.8	30	3	0	0	70	0	<10
MAY 21...	0930	--	--	--	30	1	--	0	50	0	--

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 01...	<10	10	<10	11	40	790	11000	15	230	50
MAY 21...	10	--	--	13	--	930	--	25	--	320

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 01...	200	<.5	.00	4	20	0	0	30	110	3
MAY 21...	--	.2	--	6	--	0	--	30	--	3

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 01...	30	.0	31	3.3	1.6	9.3	.0	.9	.0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 01...	.0	.3	.0	.0	.0	.0	.0	.0	0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--

01396001 ROBINSONS BRANCH RAHWAY RIVER AT MAPLE AVENUE AT RAHWAY, NJ

LOCATION.--Lat 40°36'26", long 74°17'40", Union County, Hydrologic Unit 02030104, on right upstream abutment of bridge on Maple Avenue in Rahway, 2,000 ft (610 m) downstream from Milton Lake, 1.0 mi (1.6 km) downstream from Middlesex Reservoir dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--21.6 mi^2 (55.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1939 to current year. Prior to October 1, 1978, published as "Robinsons Branch Rahway River at Rahway, NJ" (sta 01396000).

REVISED RECORDS.--WDR-NJ-75-1: 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 11.3 ft (3.44 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Sept. 26, 1978, water-stage recorder above Milton Dam at datum 8.69 ft (2.649 m) higher.

REMARKS.--Water-discharge records good. Water diverted for municipal supply by Middlesex Water Co., from Middlesex Reservoir, capacity, 300,000,000 gal (1.136 hm^3), 1.0 mi (1.6 km) above station. No diversion during the year.

AVERAGE DISCHARGE.--41 years, 25.3 ft^3/s (0.716 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft^3/s (88.1 m^3/s) July 15, 1975, gage height, 5.85 ft (1.783 m), from rating curve extended above 750 ft^3/s (21 m^3/s) on basis of flow over dam computation (site and datum then in use); maximum gage height, 6.02 ft (1.835 m) Aug. 15, 1969 (site and datum then in use); no flow many times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1800	638	18.1	3.71	1.131
Mar. 21	1645	842	23.8	4.47	1.362
Mar. 31	1315	507	14.4	3.22	0.981
Apr. 9	2230	730	20.7	4.04	1.231
Apr. 28	1430	*1290	36.5	6.33	1.929
July 6	0045	593	16.8	3.51	1.070

No flow part or all of some days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	7.1	12	10	7.8	13	342	45	9.6	13	5.0	.31
2	166	8.0	12	10	7.8	13	111	28	6.9	5.8	6.8	.22
3	48	56	7.8	12	7.8	10	41	20	21	4.6	7.9	.72
4	21	24	8.7	9.3	7.8	7.7	158	16	17	4.8	4.8	.27
5	30	10	8.9	9.2	7.8	11	76	13	6.3	30	13	.12
6	42	8.9	12	8.2	7.8	11	32	13	4.8	217	11	.02
7	16	8.6	41	8.2	7.3	8.1	25	15	36	33	3.1	.12
8	9.6	7.0	17	8.9	6.6	20	22	64	22	8.3	1.7	.22
9	22	7.8	9.8	8.4	6.2	42	290	23	13	5.7	2.4	.13
10	145	25	9.5	7.6	6.7	26	358	14	29	4.1	.70	.08
11	74	24	9.9	31	6.3	160	92	12	9.0	4.6	.71	.10
12	31	85	9.7	127	6.9	36	35	25	5.9	4.7	7.4	.01
13	28	25	42	27	6.3	20	27	44	4.9	2.0	2.0	.01
14	15	31	35	18	6.4	36	45	21	4.9	1.4	.66	.01
15	11	16	16	18	6.8	42	64	13	5.1	2.3	1.5	.03
16	9.7	12	13	15	34	41	30	10	5.2	13	3.2	.11
17	9.2	9.4	25	11	21	62	20	8.9	4.1	5.8	.45	2.2
18	8.5	8.9	11	17	11	137	17	15	5.0	2.7	.24	125
19	8.3	8.6	12	65	8.6	43	16	13	4.1	.90	.69	8.3
20	8.4	9.0	9.3	25	8.7	26	14	10	5.0	2.4	.92	2.5
21	8.2	9.4	8.9	16	9.0	290	17	43	4.2	1.5	1.2	1.5
22	8.2	8.9	12	15	21	348	14	19	2.2	9.9	1.3	1.3
23	9.1	8.8	19	20	35	126	13	11	3.1	44	.92	2.0
24	13	9.4	27	13	21	43	14	9.0	3.9	7.7	.83	.67
25	9.1	9.8	86	11	16	256	13	8.9	3.9	2.0	.44	2.4
26	8.4	112	37	9.6	17	75	12	7.8	3.2	.84	.32	12
27	7.2	64	19	8.7	8.8	31	18	5.7	3.9	.84	.29	3.5
28	16	22	14	9.2	10	23	491	6.4	3.2	1.7	.44	1.3
29	16	15	12	8.8	13	115	401	5.4	3.3	87	.38	1.0
30	8.5	12	12	7.9	---	119	119	5.5	155	23	.27	.80
31	7.4	---	10	7.5	---	301	---	9.4	---	4.7	.34	---
TOTAL	1026.8	662.6	578.5	572.5	340.4	2491.8	2927	554.0	404.7	549.28	80.90	166.95
MEAN	33.1	22.1	18.7	18.5	11.7	80.4	97.6	17.9	13.5	17.7	2.61	5.57
MAX	213	112	86	127	35	348	491	64	155	217	13	125
MIN	7.2	7.0	7.8	7.5	6.2	7.7	12	5.4	2.2	.84	.24	.01

CAL YR 1979 TOTAL 15232.97 MEAN 41.7 MAX 752 MIN .10
WTR YR 1980 TOTAL 10355.43 MEAN 28.3 MAX 491 MIN .01

01396001 ROBINSONS BRANCH RAHWAY RIVER AT MAPLE AVENUE, AT RAHWAY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 01...	1320	49	180	7.5	19.0	9.0	3.8	16000	16000	60
FEB 06...	1135	7.8	338	8.6	4.5	17.0	3.4	8	9	110
MAR 24...	1210	33	145	7.3	7.5	12.0	2.4	170	280	43
MAY 21...	1120	73	270	7.9	19.0	8.6	4.7	790	3500	93
JUL 24...	1100	7.3	216	7.9	27.5	7.3	2.6	500	<200	77
AUG 20...	1215	1.1	247	8.0	23.0	9.2	2.4	<200	350	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 01...	19	3.1	8.1	2.5	46	0	38	.0	21	14
FEB 06...	35	6.4	18	2.0	73	1	64	--	41	27
MAR 24...	13	2.5	9.2	1.9	29	0	24	--	19	11
MAY 21...	28	5.5	15	1.7	78	0	64	.0	36	17
JUL 24...	24	4.2	7.6	2.8	56	0	46	--	35	11
AUG 20...	31	5.6	10	2.2	78	0	64	--	37	15

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	.1	5.3	112	.64	.300	.90	1.2	1.8	.61	--
FEB 06...	.1	7.5	188	1.2	.060	.36	.42	1.6	<.01	8.5
MAR 24...	.1	5.8	98	1.2	.150	2.4	2.6	3.8	1.0	6.2
MAY 21...	.1	3.6	150	.69	.090	.78	.87	1.6	.22	7.1
JUL 24...	.1	6.2	142	.10	.150	.75	.90	1.0	.21	6.8
AUG 20...	.2	3.9	173	.16	.030	.74	.77	.93	.21	3.8

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN. BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 01...	1320	2900	.1	1.4	30	5	0	10	70	2	<10
MAY 21...	1120	--	--	--	50	2	--	0	60	0	--

01396001 ROBINSONS BRANCH RAHWAY RIVER AT MAPLE AVENUE, AT RAHWAY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
01...	20	10	<10	13	30	1200	1100	16	70	110
MAY										
21...	10	--	--	27	--	1000	--	18	--	270

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
01...	220	<.5	.00	3	20	0	0	30	90	2
MAY										
21...	--	.2	--	4	--	0	--	30	--	3

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
01...	24	.0	58	14	5.0	2.8	.0	1.1	.0	.0
MAY										
21...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
01...	.0	.8	.0	.0	.0	.0	.0	.0	0	.0
MAY										
21...	--	--	--	--	--	--	--	--	--	--

01396090 SOUTH BRANCH RARITAN RIVER AT OUTLET OF BUDD LAKE, NJ

LOCATION.--Lat 40°51'38", long 74°45'38", Morris County, Hydrologic Unit 02030105, at bridge on Smithtown Road, 200 ft (60 m) northwest of U.S. Route 46 and 0.5 mi (0.8 km) downstream from Budd Lake dam.

DRAINAGE AREA.--5.03 mi² (13.03 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 04...	1030	22	151	7.8	17.0	7.7	5.0	80	350	46
JAN 30...	1000	--	161	7.8	.5	11.5	2.0	20	4	44
MAR 25...	0930	--	152	7.7	4.0	11.2	2.8	50	>2400	36
MAY 20...	1300	8.6	152	7.6	19.0	9.1	4.5	20	540	41
JUL 02...	0930	--	148	6.9	22.0	4.4	4.5	230	240	43
AUG 07...	0930	--	153	7.0	19.0	4.5	4.1	--	--	50
SEP 18...	0930	--	182	6.2	18.0	3.0	E2.6	230	140	54

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 04...	12	3.9	11	.9	24	.0	6.6	20	.1
JAN 30...	11	3.9	12	.8	28	--	12	19	.1
MAR 25...	9.1	3.2	12	.9	18	--	12	22	.1
MAY 20...	9.9	4.0	12	.8	20	.1	12	21	.1
JUL 02...	11	3.7	12	1.0	28	--	7.2	21	.1
AUG 07...	13	4.3	11	1.0	38	--	7.2	20	.0
SEP 18...	14	4.7	14	1.2	38	--	5.6	23	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	1.7	87	<1.0	.500	.60	1.1	--	.21	11
JAN 30...	3.8	91	.34	.120	--	--	--	.03	4.7
MAR 25...	2.9	82	.25	.070	1.0	1.1	1.4	.44	--
MAY 20...	.9	96	.15	.120	.66	.78	.93	.09	6.6
JUL 02...	5.7	103	.19	.720	.68	1.4	1.6	.10	6.5
AUG 07...	9.6	108	.10	.180	1.2	1.4	1.5	.40	8.6
SEP 18...	15	119	.15	.130	.86	.99	1.1	.31	5.7

01396090 SOUTH BRANCH RARITAN RIVER AT OUTLET OF BUDD LAKE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
04...	1030	700	5.6	12	10	28	0	0	30	0	<10
MAY											
20...	1300	--	--	--	30	10	--	10	50	0	--
SEP											
18...	0930	2900	1.0	6.9	--	--	4	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
04...	10	<10	<10	3	20	920	8500	7	120	160
MAY										
20...	<10	--	--	2	--	720	--	4	--	140
SEP										
18...	--	<10	<10	--	10	--	11000	--	30	--

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
04...	200	<.5	.00	2	20	0	0	10	50	2
MAY										
20...	--	.1	--	2	--	0	--	0	--	3
SEP										
18...	500	--	.00	--	<10	--	0	--	40	--

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	14	.0	2	.0	.1	.9	.0	.0	.0	.0
MAY										
20...	--	--	--	--	--	--	--	--	--	--
SEP										
18...	4	.0	5	3.0	.0	.6	.0	.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	.7	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY										
20...	--	--	--	--	--	--	--	--	--	--
SEP										
18...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ

LOCATION.--Lat 40°45'40", long 74°49'18", Morris County. Hydrologic Unit 02030105, at bridge on Middle Valley Road in Middle Valley, 6.9 mi (11.1 km) downstream from Drakes Brook.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 04...	1230	146	8.0	23.0	9.9	1.0	490	240	52
JAN 30...	1115	214	7.2	.0	14.1	1.0	130	<2	78
MAR 25...	1100	122	6.8	3.0	12.5	2.4	330	>2400	33
MAY 20...	1130	168	8.5	15.5	10.9	1.8	170	240	62
JUL 02...	1030	214	7.2	18.0	9.1	.1	270	170	85
AUG 07...	1045	215	8.3	16.0	9.9	<1.5	--	--	92
SEP 18...	1045	222	7.0	16.0	9.6	<1.2	330	>2400	86

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 04...	12	5.3	7.6	1.4	30	.0	12	12	.1
JAN 30...	17	8.6	9.7	1.1	58	--	11	14	.1
MAR 25...	7.8	3.2	8.7	1.2	17	--	11	14	.1
MAY 20...	13	7.2	9.7	1.0	45	--	11	14	.1
JUL 02...	19	9.2	11	1.5	66	--	11	14	.1
AUG 07...	21	9.6	9.9	1.6	73	--	9.4	13	.1
SEP 18...	18	10	9.2	1.6	77	--	9.1	11	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	12	93	<1.0	.700	.05	.75	--	.18	4.0
JAN 30...	13	125	1.8	.170	--	--	--	.26	1.6
MAR 25...	7.7	86	.94	.160	.76	.92	1.9	.10	--
MAY 20...	11	116	1.3	.120	.33	.45	1.8	.17	1.9
JUL 02...	12	131	2.4	.300	.10	.40	2.8	.40	.5
AUG 07...	13	137	1.6	.210	.39	.60	2.2	.52	2.5
SEP 18...	9.6	121	2.0	.080	.41	.49	2.5	.71	2.5

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 04...	1230	1100	.7	5.4	40	1	0	0	30	0	<10
SEP 18...	1045	620	.2	5.3	--	--	0	--	--	--	<10

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 04...	<10	<10	<10	3	<10	600	9000	5	10	20
SEP 18...	--	<10	<10	--	<10	--	6900	--	<10	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 04...	240	<.5	.00	2	<10	0	0	10	30	2
SEP 18...	270	--	.00	--	<10	--	0	--	30	--

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 04...	0	.0	3	.4	.5	1.1	.0	.9	.0	.0
SEP 18...	7	.0	32	2.0	.0	2.5	.0	.0	.0	.0

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 04...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
SEP 18...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'40", long 74°52'46", Hunterdon County, Hydrologic Unit 02030105, on left bank 1.0 mi (1.6 km) northeast of High Bridge, and 4.4 mi (7.1 km) upstream from Spruce Run.

DRAINAGE AREA.--65.3 mi^2 (169.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 601: 1924. WSP 781: Drainage area. WSP 1552: 1919(M), 1920(M), 1921, 1923, 1924(M), 1927-28(M), 1934(M), 1941(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 28, 1930. Datum of gage is 282.10 ft (85.984 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Sept. 30, 1921, reference point at same site and datum.

REMARKS.--Water-discharge records good except those below 30 ft^3/s (0.845 m^3/s), which are fair. Slight diurnal fluctuation caused by small powerplant above station.

AVERAGE DISCHARGE.--62 years, 121 ft^3/s (3.427 m^3/s), 25.17 in/yr (639 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,910 ft^3/s (196 m^3/s) Jan. 25, 1979, gage height, 12.07 ft (3.679 m); maximum gage height, 12.23 ft (3.728 m) Feb. 24, 1979 (ice jam); minimum discharge, 6.6 ft^3/s (0.19 m^3/s) Oct. 11, 1930; minimum daily 13 ft^3/s (0.37 m^3/s) Aug. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 3	1300	1010	28.6	8.45	2.576	Mar. 21	2200	*3090	87.5	10.22	3.115
Nov. 27	0115	1230	34.8	8.71	2.655	Apr. 9	2115	1460	41.3	8.96	2.731
Jan. 12	0445	1020	28.9	8.46	2.579						

Minimum discharge, 22 ft^3/s (0.62 m^3/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	101	156	112	75	56	457	234	158	74	47	30
2	372	99	149	109	73	60	377	212	116	62	64	29
3	272	613	138	106	70	62	298	196	141	61	76	29
4	248	265	135	99	72	60	467	179	159	62	58	29
5	233	184	132	100	70	63	337	165	105	59	52	29
6	280	161	133	94	68	64	267	156	94	232	99	31
7	199	151	218	94	66	66	243	150	98	85	56	30
8	191	140	151	95	66	77	232	184	102	69	48	28
9	176	134	130	90	64	102	731	155	100	65	45	28
10	284	157	125	86	64	83	697	139	135	60	43	28
11	294	172	120	167	69	113	370	135	105	60	42	26
12	239	250	117	581	66	85	313	217	91	62	44	26
13	224	170	161	177	63	75	286	473	84	56	42	26
14	186	151	184	151	61	78	322	224	81	52	39	27
15	167	136	129	154	62	82	445	170	78	51	39	28
16	156	130	121	139	77	80	288	148	76	50	39	27
17	147	123	144	127	72	93	245	137	72	57	36	28
18	142	120	108	128	72	703	224	139	69	54	36	35
19	135	116	107	183	73	243	213	144	67	49	37	30
20	130	113	108	137	72	171	202	143	71	47	36	26
21	126	112	105	119	79	1130	192	178	69	44	37	25
22	122	109	111	116	90	1190	180	157	63	45	35	24
23	118	107	118	115	100	413	171	127	62	58	35	25
24	124	105	162	105	119	365	161	118	60	54	34	24
25	116	105	306	96	106	559	153	112	59	46	33	24
26	109	454	197	97	88	348	147	104	57	44	32	26
27	104	559	148	93	74	295	153	98	56	42	31	24
28	125	223	134	94	70	252	445	96	56	40	30	23
29	143	189	127	89	60	326	494	93	56	50	30	23
30	113	169	123	82	---	321	298	91	127	77	30	23
31	104	---	117	84	---	375	---	94	---	50	30	---
TOTAL	5789	5618	4414	4019	2161	7990	9406	4968	2667	1917	1335	811
MEAN	187	187	142	130	74.5	258	314	160	88.9	61.8	43.1	27.0
MAX	410	613	306	581	119	1190	731	473	159	232	99	35
MIN	104	99	105	82	60	56	147	91	56	40	30	23
CFSM	2.86	2.86	2.18	1.99	1.14	3.95	4.81	2.45	1.36	.95	.66	.41
IN.	3.30	3.20	2.51	2.29	1.23	4.55	5.36	2.83	1.52	1.09	.76	.46

CAL YR 1979 TOTAL 70612 MEAN 193 MAX 3340 MIN 54 CFSM 2.96 IN 40.23
WTR YR 1980 TOTAL 51097 MEAN 140 MAX 1190 MIN 23 CFSM 2.14 IN 29.11

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET AT HIGH BRIDGE, NJ

LOCATION.--Lat 40°39'49", long 74°53'52", Hunterdon County, Hydrologic Unit 02030105, at bridge on Arch Street in High Bridge, 0.9 mi (1.4 km) northeast of Mariannes Corner, 1.0 mi (1.6 km) downstream from Lake Solitude dam, and 4.3 mi (6.9 km) northeast of Norton.

DRAINAGE AREA.--68.8 mi² (178.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 11...	1100	235	150	8.1	7.0	11.8	1.0	5400	1300
JAN 31...	1145	109	210	6.8	.0	13.6	<1.0	330	<2
MAR 25...	1230	611	138	6.8	4.5	11.7	2.7	230	1600
MAY 20...	1000	131	176	8.0	16.0	9.4	1.1	230	350
JUL 02...	1130	79	202	7.5	20.5	9.0	.1	790	240
AUG 07...	1130	73	194	8.0	19.0	8.1	<.9	--	--
SEP 18...	1200	--	222	7.1	17.0	8.4	<.3	1300	>2400

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	52	12	5.3	7.2	1.4	31	13	11	.1
JAN 31...	84	18	9.4	8.8	1.1	62	14	13	.1
MAR 25...	36	8.5	3.6	8.4	1.3	32	12	13	.1
MAY 20...	67	14	7.7	9.0	1.0	48	13	12	.1
JUL 02...	77	17	8.4	7.6	1.6	57	12	12	.1
AUG 07...	76	17	8.2	8.2	1.6	65	11	11	.1
SEP 18...	93	19	11	7.7	1.5	78	12	12	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	12	--	<1.0	.400	.00	.40	--	.15	--
JAN 31...	13	126	1.9	<.030	--	--	--	.16	1.6
MAR 25...	8.2	89	1.0	.090	1.7	1.8	2.8	.09	--
MAY 20...	12	116	1.1	.120	.19	.31	1.4	.14	2.6
JUL 02...	12	131	1.6	.130	.46	.59	2.2	.29	.7
AUG 07...	11	121	1.1	.150	.45	.60	1.7	.28	3.3
SEP 18...	7.2	120	1.0	.120	.29	.41	1.4	.37	1.8

RARITAN RIVER BASIN

01396580 SPRUCE RUN AT GLEN GARDNER, NJ

LOCATION.--Lat 40°41'29", long 74°56'15", Hunterdon County, Hydrologic Unit 02030105, on right downstream wingwall of bridge on Sanatorium Road in Glen Gardner, 0.8 mi (1.3 km) downstream from Alpaugh Brook, and 2.0 mi (3.2 km) upstream from Spruce Run Reservoir.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 389.10 ft (118.598 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) Jan. 24, 1979, gage height, 7.60 ft (2.316 m), from high-water mark, from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of slope-conveyance computation; minimum, 1.3 ft³/s (0.037 m³/s) Sept. 8, 1980, gage height, 1.76 ft (0.536 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1430	393	11.1	4.02	1.225
Oct. 5	1830	*644	18.2	4.81	1.466
Nov. 3	0515	337	9.54	3.83	1.167
Mar. 21	1445	609	17.2	4.71	1.436

Note.--Peak discharges were determined from rating curve extented above 200 ft³/s (5.66 m³/s) on basis of slope-conveyance computation.

Minimum discharge, 1.3 ft³/s (0.037 m³/s) Sept. 8, gage height 1.76 ft (0.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	14	20	16	11	12	84	29	21	7.5	3.9	1.8
2	43	15	19	15	10	10	54	25	17	6.1	4.8	1.6
3	36	133	17	15	8.8	9.0	43	23	39	6.1	7.1	1.5
4	29	38	18	13	8.0	8.6	86	20	25	6.0	4.2	1.5
5	111	27	18	13	8.0	8.2	48	19	13	6.1	6.8	1.6
6	67	24	18	12	8.2	8.0	39	18	11	15	12	1.8
7	38	23	39	12	8.4	7.7	35	18	11	6.1	4.8	1.5
8	30	20	21	12	8.6	11	34	24	14	5.2	3.8	1.4
9	32	20	17	11	9.0	19	113	18	18	5.0	3.2	1.4
10	66	28	16	13	8.4	12	85	16	28	4.7	3.0	1.5
11	55	30	16	60	8.2	28	49	16	14	7.5	3.0	1.5
12	45	51	16	75	8.4	14	42	54	11	12	3.6	1.5
13	40	29	35	26	8.2	8.5	39	72	9.7	5.5	3.1	1.6
14	30	24	29	22	8.1	16	55	34	8.8	4.5	2.6	1.7
15	27	20	19	24	8.0	14	79	23	8.4	4.3	2.9	2.1
16	25	20	18	19	8.4	17	41	19	8.4	4.2	3.1	2.0
17	23	18	22	18	9.2	32	34	17	7.5	5.2	2.6	2.5
18	22	18	15	19	12	158	32	19	7.3	4.6	2.4	6.6
19	20	17	14	37	10	40	30	21	7.3	4.0	2.5	2.4
20	20	16	16	21	9.2	30	29	20	8.5	3.9	2.6	1.7
21	19	16	17	17	10	218	27	31	7.4	3.6	2.3	1.7
22	19	16	17	16	11	97	25	23	6.6	3.9	2.3	1.6
23	19	15	23	17	13	64	24	16	6.2	7.6	2.3	1.6
24	19	15	34	18	19	56	22	14	6.1	4.8	2.0	1.5
25	17	16	59	14	13	102	21	13	5.9	3.8	2.1	1.6
26	16	97	28	13	12	50	20	12	5.5	3.3	1.9	2.2
27	15	52	22	12	11	41	24	11	5.3	3.1	1.9	1.8
28	26	32	19	12	10	37	89	11	5.0	3.2	1.8	1.6
29	23	25	18	11	11	64	54	10	5.8	6.8	1.8	1.7
30	17	22	18	11	---	49	36	9.7	21	6.9	1.8	1.8
31	15	---	16	10	---	85	---	12	---	4.1	1.7	---
TOTAL	1057	891	674	604	288.1	1326.0	1393	667.7	362.7	174.6	103.9	56.3
MEAN	34.1	29.7	21.7	19.5	9.93	42.8	46.4	21.5	12.1	5.63	3.35	1.88
MAX	111	133	59	75	19	218	113	72	39	15	12	6.6
MIN	15	14	14	10	8.0	7.7	20	9.7	5.0	3.1	1.7	1.4
CFSM	2.77	2.42	1.76	1.59	.81	3.48	3.77	1.75	.98	.46	.27	.15
IN.	3.20	2.69	2.04	1.83	.87	4.01	4.21	2.02	1.10	.53	.31	.17

CAL YR 1979 TOTAL 11814.1 MEAN 32.4 MAX 570 MIN 3.6 CFSM 2.63 IN 35.73
WTR YR 1980 TOTAL 7598.3 MEAN 20.8 MAX 218 MIN 1.4 CFSM 1.69 IN 22.98

01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ

LOCATION.--Lat 40°40'41", long 74°55'06", Hunterdon County, Hydrologic Unit 02030105, at site 800 ft (244 m) downstream of Rocky Run, 0.3 mi (0.5 km) above Van Syckel Road bridge, 1.5 mi (2.4 km) northwest of High Bridge, and 1.6 mi (2.6 km) southeast of Glen Gardner.

DRAINAGE AREA.--15.5 mi^2 (40.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Field data and smaples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 11...	1300	141	8.3	10.0	7.0	<1.0	490	330	45
APR 07...	1115	132	6.9	10.5	10.8	.7	170	140	45
MAY 20...	0900	137	8.4	14.5	9.9	.8	490	240	44
JUL 02...	1230	155	7.0	20.0	9.4	<.1	2400	350	53
AUG 07...	1230	155	7.4	18.0	9.3	<1.3	--	--	--
SEP 18...	0930	142	7.6	17.0	8.2	<1.5	5400	>2400	51

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 11...	11	4.3	8.1	1.2	18	.0	19	9.6	.1
APR 07...	11	4.2	6.9	1.2	32	--	21	11	.1
MAY 20...	9.9	4.6	9.3	1.0	21	--	19	11	.1
JUL 02...	13	5.1	7.9	1.4	30	--	20	11	.1
AUG 07...	--	--	--	--	37	--	--	--	--
SEP 18...	12	5.0	7.6	1.9	26	.0	22	9.4	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	16	91	<1.0	.800	.16	.96	--	.16	2.3
APR 07...	14	93	1.2	.060	.19	.25	1.4	.75	1.2
MAY 20...	16	101	.50	.100	.12	.22	.72	.05	2.1
JUL 02...	16	100	.90	.200	.23	.43	1.3	.10	.4
AUG 07...	--	104	.56	.130	.47	.60	1.2	.25	2.1
SEP 18...	17	90	.86	.120	.70	.82	1.7	.25	4.4

01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 11...	1300	--	--	--	30	0	0	0	20	0	<10
SEP 18...	0930	530	.9	8.1	330	1	0	0	20	1	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 11...	20	10	--	3	10	330	8500	0	<10	10	200
SEP 18...	10	10	<10	5	10	1600	97000	8	10	120	180

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.1	.00	6	--	0	0	20	90	5	11	.0
SEP 18...	<.1	.00	3	<10	0	0	30	40	1	38	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SEP 18...	.0	3	.0	.0	.0	.0	.0	--	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 11...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
SEP 18...	.0	.0	.0	.0	.0	.0	--	.0	--	0	.0

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, at bridge on Jutland Road, 0.2 mi (0.3 km) south of Van Syckel, 0.8 mi (1.3 km) north of Perryville, and 0.3 mi (0.5 km) upstream from Spruce Run Reservoir.

DRAINAGE AREA.--11.8 mi^2 (30.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1973-77. July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (85.3 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,950 ft^3/s (112 m^3/s) Jan. 24, 1979, gage height, 6.48 ft (1.975 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s); minimum, 1.1 ft^3/s (0.031 m^3/s) Sept. 23, 1980, gage height, 0.66 ft (0.201 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.50 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 3	0445	333	9.43	2.92	0.890	Mar. 21	1415	*950	26.9	4.09	1.247
Jan. 11	2000	323	9.15	2.89	0.881						

Minimum discharge, 1.1 ft^3/s (0.031 m^3/s) Sept. 23, gage-height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	15	17	15	8.7	7.3	62	29	19	7.5	4.0	1.8
2	43	14	17	15	8.3	6.7	40	27	19	6.7	4.5	1.6
3	36	108	16	14	8.4	6.5	35	27	22	7.0	4.3	1.6
4	34	28	16	13	8.9	7.4	84	24	18	6.5	3.3	1.7
5	32	22	16	13	8.8	8.9	40	23	12	8.7	4.9	2.2
6	40	20	19	12	8.5	8.7	34	22	11	11	3.9	2.2
7	29	19	28	12	9.1	8.5	32	22	11	5.7	3.0	1.7
8	26	18	18	12	9.1	12	31	26	24	5.5	3.2	1.6
9	24	17	16	11	9.2	15	85	22	23	5.3	3.4	1.6
10	33	25	15	10	9.4	11	62	20	25	4.9	2.6	1.7
11	41	28	15	58	9.7	22	37	21	16	8.0	2.7	1.6
12	33	40	15	52	9.9	10	34	38	12	11	3.0	1.5
13	28	23	32	20	9.4	8.2	32	50	11	5.3	2.5	1.6
14	25	21	23	19	9.4	15	44	27	11	4.8	2.4	1.8
15	23	19	17	20	9.8	14	56	22	10	4.4	4.5	2.2
16	21	18	18	17	12	15	34	20	9.3	4.4	3.5	1.8
17	19	17	20	16	10	36	30	19	8.5	6.1	2.5	5.9
18	18	17	14	23	9.5	87	29	21	8.3	4.4	2.4	20
19	18	17	14	25	10	25	27	23	8.0	4.0	2.6	3.6
20	17	16	15	18	12	21	27	21	10	3.7	2.5	2.8
21	17	16	15	16	13	210	26	33	8.0	3.4	2.3	2.6
22	16	15	16	16	14	69	25	22	7.4	3.7	2.4	2.5
23	16	15	22	15	23	39	24	19	7.0	7.6	2.4	2.1
24	17	15	30	13	25	38	23	17	6.7	4.1	2.1	2.0
25	15	15	40	13	19	83	23	16	6.4	3.4	1.9	2.5
26	15	78	23	12	11	36	22	14	6.1	3.2	1.8	3.9
27	15	32	19	12	9.8	31	32	13	5.9	3.1	1.8	2.3
28	23	23	17	12	9.0	29	97	12	5.6	3.0	1.7	2.3
29	19	20	17	11	6.8	57	48	12	6.8	12	1.9	2.3
30	16	18	16	9.4	---	39	33	12	20	7.1	2.0	2.5
31	15	---	15	9.2	---	81	---	16	---	4.3	2.0	---
TOTAL	779	749	591	533.6	320.7	1057.2	1208	690	368.0	179.8	88.0	85.5
MEAN	25.1	25.0	19.1	17.2	11.1	34.1	40.3	22.3	12.3	5.80	2.84	2.85
MAX	55	108	40	58	25	210	97	50	25	12	4.9	20
MIN	15	14	14	9.2	6.8	6.5	22	12	5.6	3.0	1.7	1.5
CFSM	2.13	2.12	1.62	1.46	.94	2.89	3.42	1.89	1.04	.49	.24	.24
IN.	2.46	2.36	1.86	1.68	1.01	3.33	3.81	2.18	1.16	.57	.28	.27

CAL YR 1979 TOTAL 10894.6 MEAN 29.8 MAX 567 MIN 4.6 CFSM 2.53 IN 34.34
WTR YR 1980 TOTAL 6649.8 MEAN 18.2 MAX 210 MIN 1.5 CFSM 1.54 IN 20.96

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 03...	1230	25	170	--	11.0	8.1	1.0	1700	>2400	57
JAN 31...	1045	18	164	7.0	.0	13.7	<1.0	490	8	70
APR 07...	1015	33	138	7.0	9.5	10.8	.7	20	31	54
MAY 20...	1000	22	158	7.6	14.5	10.2	1.1	790	1600	53
JUL 02...	0930	7.3	205	7.7	17.0	9.1	<.9	2400	220	70
AUG 07...	1010	3.3	210	6.9	19.0	7.6	<.1	--	--	90
SEP 18...	0940	12	146	7.4	17.0	8.3	E2.7	9200	>2400	62

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 03...	15	4.8	5.7	1.7	39	.0	18	7.9	.1
JAN 31...	18	6.0	6.1	1.0	46	--	20	7.0	.1
APR 07...	14	4.5	5.1	1.2	37	--	20	7.2	.1
MAY 20...	13	5.0	7.1	1.6	34	.0	18	7.0	.1
JUL 02...	18	6.1	5.8	1.4	49	--	17	7.3	.1
AUG 07...	23	8.0	7.0	1.5	70	--	17	7.2	.2
SEP 18...	16	5.4	6.6	2.4	34	.0	25	7.2	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	14	107	<1.0	.500	.04	.54	--	.08	7.3
JAN 31...	16	109	1.5	<.030	--	--	--	--	1.5
APR 07...	13	94	1.1	.070	.24	.31	1.4	.02	1.8
MAY 20...	15	103	.83	.110	.00	.11	.94	.02	3.0
JUL 02...	15	120	1.1	.170	.23	.40	1.5	--	.5
AUG 07...	16	124	1.0	.110	.42	.53	1.5	.03	1.9
SEP 18...	15	108	.96	.130	.45	.58	1.5	.26	5.4

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 03...	1230	--	--	--	50	4	--	10	10	0	--
MAY 20...	1000	--	--	--	40	1	--	0	4	0	--
SEP 18...	0940	650	.1	6.3	30	1	0	0	30	1	<10

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 03...	10	--	--	2	--	350	--	1	--	20
MAY 20...	<10	--	--	1	--	300	--	1	--	30
SEP 18...	10	<10	<10	4	<10	1400	3300	9	<10	70

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 03...	--	<.5	--	3	--	0	--	10	--	2
MAY 20...	--	.5	--	0	--	0	--	40	--	3
SEP 18...	240	<.5	.00	3	<10	0	0	30	20	2

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 03...	--	--	--	--	--	--	--	--	--	--
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	0	.0	0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 03...	--	--	--	--	--	--	--	--	--	--
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01396800 SPRUCE RUN AT CLINTON, NJ

LOCATION.--Lat 40°38'21", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, 1,800 ft (550 m) downstream from dam at Spruce Run Reservoir, 0.2 mi (0.3 km) north of Clinton, 0.3 mi (0.5 km) upstream from mouth, and 2.2 mi (3.5 km) southwest of High Bridge.

DRAINAGE AREA.--41.3 mi^2 (107.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1959 to current year.

GAGE.--Water-stage recorder. Concrete control since Mar. 15, 1964. Datum of gage is 193.5 ft (58.98 m) revised, National Geodetic Vertical Datum of 1929. May to Nov. 24, 1959, nonrecording gage; Nov. 25, 1959 to July 23, 1961, water-stage recorder at site 1,800 ft (550 m) upstream and at datum 1.41 ft (0.430 m) lower; July 24, 1961 to Mar. 14, 1964, water-stage recorder at site 1,500 ft (460 m) upstream at datum 1.41 ft (0.430 m) lower.

REMARKS.--Water-discharge records poor. No gage-height record Apr. 18 to May 18. Flow regulated by Spruce Run Reservoir (see Raritan River Basin, reservoirs in).

AVERAGE DISCHARGE.--21 years, 62.2 ft^3/s (1.762 m^3/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 6,410 ft^3/s (182 m^3/s) Apr. 2, 1970, gage height, 5.17 ft (1.576 m); no flow Aug. 22 to Sept. 17, 1963, Sept. 19, 1963 to Mar. 14, 1964, Mar. 19, 1964, result of filling Spruce Run Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,160 ft^3/s (32.9 m^3/s) Mar. 21, gage height, 3.06 ft (0.933); minimum, 1.1 ft^3/s (0.031 m^3/s) Mar. 9, gage height, 1.12 ft (0.341 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	58	58	58	68	128	300	108	67	45	78	88
2	170	58	67	27	8.3	130	212	86	46	62	78	88
3	104	107	70	6.8	7.7	130	166	81	68	55	54	59
4	77	121	60	6.6	7.6	99	276	65	97	86	44	91
5	212	79	58	6.6	7.6	25	230	58	41	87	44	92
6	367	68	58	6.8	7.6	25	134	53	30	44	47	95
7	156	80	60	31	7.6	25	127	48	44	18	33	95
8	97	65	78	57	7.6	22	120	67	91	56	31	98
9	81	59	60	56	7.6	1.5	261	70	48	84	65	114
10	154	60	58	55	7.6	3.0	326	44	62	66	65	128
11	163	60	58	57	7.6	6.0	190	43	56	63	65	124
12	122	88	58	79	7.6	5.6	147	84	42	67	59	117
13	118	81	58	58	7.6	6.1	135	205	44	72	61	110
14	86	96	58	57	7.6	18	150	136	67	74	55	108
15	64	65	58	58	7.6	9.0	227	136	67	127	60	108
16	54	73	58	57	8.1	9.7	185	84	48	151	60	101
17	55	68	78	57	7.6	10	84	84	35	137	60	117
18	55	59	58	58	7.6	177	95	58	43	123	60	24
19	50	58	58	65	7.6	169	92	11	48	110	60	37
20	49	58	58	62	7.6	138	92	9.3	66	93	60	72
21	48	58	58	61	7.6	505	92	29	60	124	60	70
22	74	58	58	58	8.1	560	78	65	59	116	60	52
23	72	58	58	61	8.2	256	58	55	52	42	60	49
24	99	58	58	66	8.0	236	60	48	60	31	62	56
25	73	58	58	56	7.9	338	60	50	75	58	75	70
26	65	58	58	55	7.9	248	70	47	78	96	75	56
27	62	70	61	55	7.8	210	70	34	84	125	76	51
28	62	78	64	55	21	105	205	18	84	124	89	45
29	64	86	60	56	89	48	221	9.0	84	50	88	54
30	17	72	58	56	---	152	150	29	44	15	88	58
31	33	---	58	75	---	232	---	45	---	40	88	---
TOTAL	3021	2115	1876	1572.8	379.2	4026.9	4613	1959.3	1790	2441	1960	2457
MEAN	97.5	70.5	60.5	50.7	13.1	130	154	63.2	59.7	78.7	63.2	81.9
MAX	367	121	78	79	89	560	326	205	97	151	89	128
MIN	17	58	58	6.6	7.6	1.5	58	9.0	30	15	31	24

CAL YR 1979 TOTAL 34731.5 MEAN 95.2 MAX 1300 MIN 5.9
WTR YR 1980 TOTAL 28211.2 MEAN 77.1 MAX 560 MIN 1.5

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-62, 1967 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to September 1969, January 1971 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1960 to April 1961.

REMARKS.--Water temperatures taken at outflow of dam.

COOPERATION.--Once daily water temperatures supplied by New Jersey Water Supply Facilities Element. Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 24.5°C July 31, 1973; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 23.0°C Sept. 23; minimum daily, 0.0°C Feb. 4, 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
03...	1330	98	150	--	19.0	9.2	1.0	230	23	49
JAN										
31...	0930	55	146	7.8	.0	13.7	<1.0	20	49	53
APR										
07...	0815	128	143	7.1	8.0	9.2	1.3	<20	<2	52
MAY										
20...	1115	9.0	152	7.8	16.5	10.8	1.9	110	2	51
JUL										
02...	1030	84	144	7.5	17.5	9.6	<.1	<20	23	48
AUG										
07...	1050	20	155	6.4	18.5	8.2	<.7	--	--	60
SEP										
18...	1130	14	138	7.1	19.0	8.1	<1.4	130	920	49

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
03...	12	4.6	6.1	1.3	29	.0	16	8.8	.1
JAN									
31...	13	4.9	6.6	1.3	38	--	17	9.0	.1
APR									
07...	13	4.8	5.8	1.3	26	--	18	9.4	.1
MAY									
20...	12	5.2	7.2	1.2	33	.0	17	8.7	.1
JUL									
02...	12	4.4	5.7	1.0	33	--	17	9.0	.1
AUG									
07...	15	5.5	6.6	1.5	43	--	15	8.8	.1
SEP									
18...	12	4.7	6.4	1.5	31	--	16	8.6	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	4.7	84	<1.0	.300	.42	.72	--	.08	6.6
JAN									
31...	7.8	90	.33	--	--	--	--	--	3.5
APR									
07...	6.6	91	.52	.100	.44	.54	1.1	.31	4.8
MAY									
20...	6.7	91	.38	.270	.00	.27	.65	.02	2.5
JUL									
02...	6.1	84	.25	.200	.41	.61	.86	.10	.9
AUG									
07...	8.1	88	.15	.210	.41	.62	.77	.03	2.1
SEP									
18...	9.0	80	.15	.160	.50	.66	.81	.09	3.8

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
03...	1330	30	4	0	7	0	20	5
MAY								
20...	1115	30	1	0	10	0	<10	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
03...	170	0	50	<.5	3	0	10	1
MAY								
20...	180	4	150	<.5	0	0	90	1

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.0	9.0	4.0	.5	2.0	5.5	10.0	14.0	16.5	19.0	21.0
2	17.0	12.5	9.0	4.0	1.0	2.5	5.5	10.0	15.0	18.0	19.5	22.0
3	17.0	12.5	9.0	4.0	.5	2.0	6.0	10.0	14.0	15.5	19.0	21.5
4	17.5	12.0	9.5	3.5	.0	2.0	6.0	10.0	14.0	17.0	19.5	21.0
5	17.0	12.0	8.0	2.5	.0	3.0	7.0	11.0	12.0	17.0	19.5	21.0
6	17.0	11.5	7.5	1.5	1.5	3.0	7.0	11.5	12.0	18.0	19.5	21.0
7	17.0	11.5	8.0	2.5	2.0	2.5	7.0	11.0	14.0	18.5	22.0	21.5
8	16.5	11.0	7.5	2.0	2.0	4.0	7.0	11.0	14.0	15.0	21.0	21.0
9	17.0	---	7.0	2.0	1.0	4.0	7.0	11.0	14.0	18.0	20.0	21.5
10	15.0	11.5	7.0	2.0	1.0	4.0	9.0	12.0	10.5	18.0	19.0	21.5
11	15.0	11.0	7.0	2.5	1.5	3.0	9.0	12.0	10.5	17.0	19.0	21.0
12	15.0	11.0	7.0	2.0	1.5	2.0	9.0	12.5	10.5	18.0	19.0	21.0
13	15.0	11.0	7.0	1.5	1.5	2.0	10.0	13.0	10.5	18.5	20.0	21.0
14	14.0	11.0	6.5	2.5	1.5	3.0	9.0	12.5	14.5	18.5	19.0	21.5
15	13.5	10.5	6.0	3.0	1.5	2.0	10.0	12.0	15.0	18.5	19.5	21.5
16	13.5	10.5	6.0	2.5	2.0	2.0	10.0	12.0	15.0	19.0	19.0	20.0
17	14.0	11.0	5.0	2.0	1.5	2.0	9.5	10.5	13.0	20.0	19.0	20.0
18	13.0	11.0	4.5	2.0	1.5	3.0	10.0	11.0	13.0	19.5	19.0	21.0
19	13.0	11.0	4.0	2.0	2.0	4.0	10.0	10.5	14.5	18.5	19.5	21.0
20	13.0	10.0	4.0	2.0	2.5	4.0	10.0	10.5	15.0	18.0	19.5	20.5
21	14.0	10.0	4.5	2.0	2.5	5.0	10.0	10.5	16.0	18.0	19.5	21.0
22	14.0	10.0	4.5	2.0	2.0	4.0	10.0	10.5	16.0	19.5	19.5	22.5
23	13.5	---	5.0	2.5	3.0	5.0	10.0	10.5	16.0	22.5	20.0	23.0
24	14.0	11.0	4.5	1.0	3.0	4.0	10.0	13.0	16.0	17.0	20.0	21.5
25	14.0	11.0	5.0	1.5	3.0	4.5	10.5	13.0	16.0	17.5	20.0	21.0
26	13.0	10.5	4.5	1.0	2.5	4.5	10.0	12.5	17.0	19.0	22.0	21.5
27	13.0	10.5	4.0	1.0	3.0	4.5	10.0	12.5	17.0	19.0	20.5	20.0
28	12.5	10.0	4.0	1.0	2.5	5.0	10.0	12.5	17.0	20.0	20.0	19.0
29	12.5	10.0	4.0	1.0	1.5	5.0	10.0	12.5	17.5	19.0	20.5	19.0
30	12.5	9.5	4.0	1.0	---	5.5	10.0	13.0	16.5	19.0	21.0	20.0
31	12.0	---	4.0	1.0	---	5.5	---	13.5	---	20.0	21.0	---
MEAN	14.5	11.0	6.0	2.0	1.5	3.5	9.0	11.5	14.5	18.5	20.0	21.0

WTR YR 1980 MEAN 11.0 MAX 23.0 MIN .0

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ

LOCATION.--Lat 40°34'21", long 74°52'10", Hunterdon County, Hydrologic Unit 02030105, on right bank at downstream side of highway bridge at Stanton, and 0.4 mi (0.6 km) upstream from Prescott Brook.

DRAINAGE AREA.--147 mi² (381 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to December 1906, July 1919 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 561: Drainage area. WSP 1552: 1904, 1922-24(M), 1928-29(M), 1933-35(M).

GAGE.--Water-stage recorder. Datum of gage is 125.01 ft (38.103 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1925, nonrecording gage on downstream side of highway bridge at same site and datum.

REMARKS.--Water-discharge records good except those for December and February, which are fair. Flow regulated by Spruce Run Reservoir since September 1963 (see Raritan River Basin, reservoirs in). Occasional regulation at low flows by ponds above station. Slight diurnal fluctuation caused by small powerplants above station. Water diverted by Hamden Pumping Station, 4.0 mi (6.4 km) upstream, into Round Valley Reservoir since February 1966 (see Raritan River Basin, diversions).

AVERAGE DISCHARGE.--64 years (water years 1904-06, 1920-80) 243 ft³/s (6.882 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) Aug. 19, 1955, gage height, 15.22 ft (4.639 m), from rating curve extended above 6,400 ft³/s (180 m³/s) on basis of computation of flow over Clinton Dam, 6.5 mi (10.5 km) upstream, at gage height 10.72 ft (3.269 m) contracted-opening measurement 1.7 mi (2.7 km) downstream, and slope-area measurement 0.4 mi (0.6 km) downstream, at gage height 15.22 ft (4.639 m), adjusted to present site; minimum, 9 ft³/s (0.25 m³/s) Nov. 7, 1931; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 18, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,330 ft³/s (123 m³/s) Mar. 22, gage height, 8.30 ft (2.530 m); minimum, 53 ft³/s (1.50 m³/s) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	219	303	243	165	282	1130	445	260	123	129	131
2	943	217	300	210	157	266	889	381	201	143	138	130
3	503	988	285	167	150	261	671	357	214	115	139	128
4	540	603	271	154	150	230	1000	339	326	154	116	128
5	759	377	264	156	150	131	819	276	182	149	101	130
6	1050	329	265	160	143	132	565	264	143	315	145	132
7	544	320	377	189	138	130	512	250	160	118	112	129
8	443	294	311	208	138	143	481	321	221	125	73	127
9	387	274	260	201	138	170	1140	292	185	151	116	133
10	705	301	250	204	135	134	1510	234	248	138	112	150
11	717	332	244	309	140	177	807	222	200	123	111	148
12	567	507	239	930	135	144	647	307	157	161	109	144
13	537	363	297	355	130	127	583	846	141	130	110	135
14	421	346	355	307	125	156	618	468	164	131	98	136
15	355	297	266	305	118	168	894	311	160	160	116	140
16	325	291	252	283	135	138	632	304	147	194	115	133
17	308	274	307	264	138	192	458	328	118	195	110	147
18	299	258	237	267	137	1230	420	288	125	172	108	140
19	282	249	235	376	141	633	395	199	124	166	109	65
20	270	244	230	296	128	430	373	203	145	139	109	109
21	260	239	231	267	126	1810	362	265	144	160	109	108
22	273	234	236	250	152	2680	331	291	134	162	109	87
23	272	230	247	254	191	957	296	233	128	129	108	84
24	304	225	303	254	207	823	283	207	122	85	106	84
25	268	223	518	235	174	1250	271	197	141	104	116	106
26	246	596	394	225	147	817	266	182	139	132	120	96
27	233	930	309	226	126	668	280	161	144	157	114	90
28	254	443	289	210	142	529	754	138	143	171	130	76
29	301	384	273	203	203	555	948	125	143	129	130	84
30	195	339	263	185	---	671	597	132	231	105	131	91
31	183	---	253	175	---	919	---	159	---	92	131	---
TOTAL	13526	10926	8864	8068	4259	16953	18932	8725	5090	4528	3580	3521
MEAN	436	364	286	260	147	547	631	281	170	146	115	117
MAX	1050	988	518	930	207	2680	1510	846	326	315	145	150
MIN	183	217	230	154	118	127	266	125	118	85	73	65

CAL YR 1979 TOTAL 154434 MEAN 423 MAX 6880 MIN 81
WTR YR 1980 TOTAL 106972 MEAN 292 MAX 2680 MIN 65

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ

LOCATION.--Lat 40°36'28", long 74°50'54", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road at Round Valley, 3.3 mi (5.3 km) west of Whitehouse Station, and 4.1 mi (6.6 km) upstream from mouth.

DRAINAGE AREA.--4.61 mi^2 (11.94 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 07...	1015	1.3	165	7.0	7.0	12.0	--	<20	<2
MAR 26...	1015	1.2	171	7.0	8.0	11.9	<.9	<20	2
MAY 20...	1300	.79	180	7.0	10.5	10.1	1.4	130	130
JUL 02...	1150	14	160	6.7	--	10.3	.1	<20	8
AUG 07...	1215	.51	180	6.7	15.0	10.2	<1.2	--	--
SEP 18...	1100	.51	154	7.4	12.5	11.0	3.3	70	130

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 07...	63	17	5.1	5.7	.7	51	20	6.9	.1
MAR 26...	65	17	5.5	6.6	.8	46	19	5.1	.1
MAY 20...	65	16	6.0	6.5	.7	48	18	6.9	.1
JUL 02...	53	13	5.0	5.1	1.3	34	18	7.6	.1
AUG 07...	76	20	6.3	6.3	.9	56	18	7.2	.1
SEP 18...	71	18	6.3	6.7	1.1	51	18	7.2	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	7.0	101	--	.140	.19	.33	--	<.01	--
MAR 26...	8.7	99	.37	.140	.09	.23	.60	.06	1.7
MAY 20...	7.6	105	.26	.070	.11	.18	.44	.02	1.8
JUL 02...	1.2	91	.10	.120	.22	.34	.44	.02	.9
AUG 07...	7.5	102	.10	.110	.18	.29	.39	--	1.4
SEP 18...	6.2	96	<.05	.130	.33	.46	--	.06	1.6

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
SEP 18...	1100	3800	.0	16	0	<10	20	<10	<10	4100	<10	250

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
18...	.00	<10	0	30	4	.0	3	.0	1.0	.0	.0	.0

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
18...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01397380 BUSHKILL BROOK AT ROCKEFELLOWS MILLS, NJ

LOCATION.--Lat 40°31'15", long 74°49'40", Hunterdon County, Hydrologic Unit 02030501, at bridge on unnamed road in Rockefellows Mills, 200 ft (61 m) upstream from mouth, and 1.5 mi (2.4 km) west of Three Bridges.

DRAINAGE AREA.--4.31 mi² (11.16 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 02...	1115	365	--	16.0	7.6	--	9200	>2400	120
FEB 06...	0845	690	6.8	9.0	9.2	<1.1	<20	<2	300
APR 08...	0900	520	7.2	8.0	8.2	1.3	50	33	220
MAY 20...	1000	262	7.4	16.5	5.1	2.6	220	170	110
JUL 02...	1045	335	7.9	18.0	4.9	<1.0	1400	79	180
AUG 07...	0915	925	7.7	24.5	7.4	<.1	--	--	470
SEP 18...	1245	675	7.5	19.0	5.7	E2.6	9200	>2400	250

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 02...	34	7.8	21	3.2	65	.0	41	24	.1
FEB 06...	100	13	24	1.8	110	--	200	22	.2
APR 08...	68	11	21	2.0	82	--	130	22	.1
MAY 20...	28	8.7	12	1.3	58	.0	47	14	.1
JUL 02...	58	9.5	14	1.7	75	--	110	16	.2
AUG 07...	160	17	27	1.9	120	--	330	24	.3
SEP 18...	79	13	32	3.6	70	.0	190	43	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	13	218	2.8	.500	1.0	1.5	4.3	.77	5.6
FEB 06...	16	492	--	.440	.40	.84	--	1.0	5.7
APR 08...	13	338	2.5	.300	.41	.71	3.2	.58	3.3
MAY 20...	11	182	1.7	.160	.19	.35	2.0	.24	4.1
JUL 02...	11	312	1.3	.270	.21	.48	1.8	.50	.8
AUG 07...	19	750	2.0	.120	.67	.79	2.8	1.5	.5
SEP 18...	13	472	2.0	.260	1.2	1.5	3.5	1.6	10

01397380 BUSHKILL BROOK AT ROCKEFELLOWS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 02...	1115	4400	1.9	29	50	1	0	0	70	0	<10
MAY 20...	1000	--	--	--	70	1	--	0	50	0	--
SEP 18...	1245	5300	1.1	31	30	4	1	0	280	0	<10

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 02...	10	20	10	26	140	800	16000	7	180	110
MAY 20...	10	--	--	3	--	340	--	1	--	70
SEP 18...	20	20	<10	20	190	690	11000	10	130	130

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 02...	780	<.5	.00	3	30	0	0	30	370	0
MAY 20...	--	.2	--	0	--	0	--	0	--	1
SEP 18...	350	<.1	.00	4	<10	0	0	30	190	2

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 02...	13	.0	3	1.6	.0	1.0	--	.0	.0	--
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	92	.0	67	.0	.0	.0	.0	2.3	.0	.0

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 02...	.0	2.0	.0	--	.0	--	--	--	0	--
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ

LOCATION.--Lat 40°31'01", long 74°48'12", Hunterdon County, Hydrologic Unit 02030105, at bridge on Main Street in Three Bridges, 0.4 mi (0.7 km) northeast of Voorhees Corner, 1.3 mi (2.1 km) downstream of Bushkill Brook, and 2.2 mi (3.6 km) southeast of Darts Mills.

DRAINAGE AREA.--181 mi^2 (469 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 06...	1015	137	270	7.1	.0	14.6	E.8	20	2	96
APR 08...	1030	442	180	7.0	7.0	11.8	.3	20	23	65
MAY 20...	1100	211	208	7.4	17.0	9.2	1.6	700	920	77
JUL 02...	1200	176	219	8.3	22.0	9.6	<1.0	3500	170	78
AUG 07...	1030	146	226	8.4	25.0	8.6	<.7	--	--	97
SEP 18...	1100	176	204	8.8	21.0	8.9	<2.0	3500	920	79

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 06...	24	8.7	13	1.6	67	--	33	15	.1
APR 08...	16	6.0	9.3	1.4	42	--	14	13	.2
MAY 20...	18	7.8	11	1.2	51	.5	23	14	.1
JUL 02...	19	7.4	8.6	1.6	56	--	22	13	.1
AUG 07...	24	9.0	8.9	1.6	72	--	22	11	.1
SEP 18...	22	5.8	19	2.6	44	--	26	18	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	13	153	2.3	.100	.44	.54	2.8	.27	6.9
APR 08...	9.8	86	1.6	.350	.39	.74	2.3	.17	4.2
MAY 20...	11	140	1.6	.110	.43	.54	2.1	.23	5.0
JUL 02...	8.8	142	1.1	.120	.30	.42	1.5	.22	3.0
AUG 07...	9.2	143	.15	.120	.65	.77	.92	.25	1.2
SEP 18...	2.5	122	.68	.120	.58	.70	1.4	.40	3.6

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
20...	1100	40	2	0	30	0	<10	15

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
20...	3200	3	180	.4	5	0	20	5

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'18", long 74°49'42", Hunterdon County, Hydrologic Unit 02030105, on left bank 50 ft (15 m) downstream from highway bridge, 0.6 mi (1.0 km) southwest of Reaville, 1.5 mi (2.4 km) downstream from Third Neshanic River, and 2.2 mi (3.5 km) upstream from Back Brook.

DRAINAGE AREA.--25.7 mi^2 (66.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1930 to current year.

REVISED RECORD.--WSP 1552: 1933, 1934(M), 1936(M), 1938, 1940(M), 1942(M), 1945-46, 1951, 1952(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 26, 1935. Datum of gage is 109.46 ft (33.363 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those for periods of no gage-height record, Mar. 13 to May 15 and May 20 to Jun. 12, which are poor.

AVERAGE DISCHARGE.--50 years, 36.2 ft^3/s (1.025 m^3/s), 19.11 in/yr (485 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft^3/s (450 m^3/s) Aug. 28, 1971, gage height, 13.84 ft (4.218 m) from high-water mark in gage house, from rating curve extended above 1,700 ft^3/s (48 m^3/s) on basis of slope-area measurement 0.7 mi (1.1 km) downstream (adjusted to present site) at gage height 11.90 ft (3.627 m); no flow many days 1965, 1966, and part of July 17, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	Unknown	*2820	79.9	8.61	2.624

Minimum discharge, 0.04 ft^3/s (0.001 m^3/s) Sept. 13-14, gage height, 2.02 ft (0.616 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	12	31	25	10	5.7	224	44	5.5	2.6	2.6	.17
2	152	12	27	22	9.6	7.2	142	36	5.2	2.2	1.6	.15
3	94	232	23	21	9.0	8.4	76	27	5.8	2.0	1.8	.18
4	66	75	23	18	9.0	6.5	145	21	11	2.1	1.2	.19
5	63	52	21	18	8.6	6.8	97	17	5.7	1.9	2.2	.15
6	56	43	24	16	8.0	34	56	15	4.2	3.2	3.3	.13
7	43	37	58	13	8.3	24	43	13	4.0	1.5	1.2	.14
8	36	32	29	14	8.0	16	36	41	4.7	1.5	.92	.17
9	44	28	24	13	7.8	16	337	26	4.6	1.5	1.1	.13
10	252	45	23	12	7.6	17	233	16	6.4	1.3	.86	.13
11	130	45	21	91	7.2	45	79	13	5.4	1.0	.78	.08
12	94	144	21	158	6.9	21	54	42	5.0	1.1	.84	.06
13	79	66	54	53	6.2	20	43	145	4.7	1.1	.85	.06
14	56	53	49	47	6.3	45	47	55	4.3	.92	.63	.05
15	46	42	35	47	6.5	57	65	28	4.1	.71	.48	8.1
16	39	37	33	35	11	70	36	23	4.0	.77	.62	1.0
17	33	32	37	30	9.0	284	30	19	3.4	4.8	.63	.50
18	30	28	26	37	6.4	257	26	20	3.0	1.6	.44	8.1
19	28	25	22	101	6.2	84	23	18	3.0	1.1	.40	1.4
20	26	23	23	50	6.4	58	20	16	3.2	.84	.53	.69
21	24	21	22	40	7.5	574	19	37	2.7	.83	.43	.54
22	22	20	23	35	20	207	16	33	2.3	1.3	.45	.52
23	20	19	28	36	51	86	14	17	2.3	7.4	.43	.43
24	22	17	53	25	20	74	13	13	2.1	1.6	.44	.37
25	18	16	131	24	10	218	12	11	1.9	1.0	.42	.56
26	16	171	67	20	8.9	92	11	9.2	1.6	.78	.31	1.5
27	15	89	50	18	6.9	60	15	7.5	1.9	.79	.25	.75
28	19	59	41	17	6.4	46	122	6.4	1.8	.86	.35	.44
29	18	45	35	14	5.6	132	94	5.7	1.8	5.0	.18	.42
30	14	36	32	13	---	130	48	5.3	9.3	2.1	.15	.43
31	13	---	28	12	---	290	---	5.2	---	1.2	.18	---
TOTAL	1963	1556	1114	1075	294.3	2991.6	2176	785.3	124.9	56.60	26.57	27.54
MEAN	63.3	51.9	35.9	34.7	10.1	96.5	72.5	25.3	4.16	1.83	.86	.92
MAX	395	232	131	158	51	574	337	145	11	7.4	3.3	8.1
MIN	13	12	21	12	5.6	5.7	11	5.2	1.6	.71	.15	.05
CFSM	2.46	2.02	1.40	1.35	.39	3.76	2.82	.98	.16	.07	.03	.04
IN.	2.84	2.25	1.61	1.56	.43	4.33	3.15	1.14	.18	.08	.04	.04

CAL YR 1979 TOTAL 26530.50 MEAN 72.7 MAX 1760 MIN 2.5 CFSM 2.83 IN 38.40
WTR YR 1980 TOTAL 12190.81 MEAN 33.3 MAX 574 MIN .05 CFSM 1.30 IN 17.65

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, and 1979.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
APR										
07...	1245	56	265	7.2	13.0	11.8	.9	<20	13	79
MAY										
20...	0845	16	248	7.2	17.0	8.6	1.7	2400	70	83
JUL										
02...	0930	2.2	438	7.6	21.5	5.9	<.1	2400	540	130
AUG										
07...	0850	1.1	319	6.7	23.0	4.0	<.6	--	--	110
SEP										
18...	0915	9.6	--	6.9	20.0	3.3	8.4	>2400	>2400	120

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR									
07...	20	7.1	19	1.6	31	--	31	34	.1
MAY									
20...	20	8.1	17	1.4	48	.0	33	22	.1
JUL									
02...	34	11	30	2.6	75	--	45	52	.1
AUG									
07...	29	9.7	14	2.9	63	--	39	25	.2
SEP									
18...	34	9.4	38	10	27	.0	40	100	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR									
07...	11	167	.10	.080	.06	.14	.24	.28	1.1
MAY									
20...	8.8	171	2.1	.120	.31	.43	2.5	.09	2.3
JUL									
02...	8.4	284	.41	.170	.63	.80	1.2	.09	3.6
AUG									
07...	6.6	192	.90	.200	.70	.90	1.8	.40	4.3
SEP									
18...	4.1	321	1.1	.210	3.3	3.5	4.6	1.1	12

DATE	TIME	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
MAY											
20...	0845	--	--	--	30	1	--	0	30	0	--
SEP											
18...	0915	6700	.1	19	40	2	2	0	80	1	<10

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY 20...	20	--	--	2	--	210	--	2	--	40
SEP 18...	10	20	<10	10	20	1500	13000	12	30	520

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
MAY 20...	--	.2	--	0	--	0	--	0	--	1
SEP 18...	380	.2	.00	4	<10	0	0	40	110	2

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	15	.0	9	1.2	.0	.0	.0	1.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 20...	--	--	--	--	--	--	--	--	--	--
SEP 18...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01398045 BACK BROOK TRIBUTARY NEAR RINGOES, NJ

LOCATION.--Lat 40°25'41", long 74°49'52", Hunterdon County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on Wertsville Road, 2.1 mi (3.4 km) east of Ringoes, 1.3 mi (2.1 km) upstream from Back Brook, and 2.3 mi (3.7 km) southwest of Wertsville.

DRAINAGE AREA.--1.98 mi² (5.13 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 156 ft (47.5 m), from topographic map.

REMARKS.--Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1290 ft³/s (36.5 m³/s) Aug. 3, 1979, gage height, 5.05 ft (1.539 m), from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of contracted-opening measurement at gage height 4.64 ft (1.414 m); minimum daily, 0.01 ft³/s (0.001 m³/s) Feb. 19, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 436 ft³/s (12.3 m³/s) Mar. 21, gage height, 2.99 ft (0.911 m), no peak above base of 500 ft³/s (14.2 m³/s); minimum daily, 0.03 ft³/s (0.001 m³/s) Aug. 10, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	.98	2.3	2.7	.76	.66	32	4.4	.15	.11	.21	.05
2	90	1.1	2.0	2.3	.89	.65	10	3.0	.16	.10	.13	.05
3	26	33	1.7	2.1	.91	.57	5.4	2.5	.41	.12	.23	.05
4	9.2	8.7	1.6	1.9	1.0	.51	21	2.1	.21	.12	.13	.05
5	8.2	4.1	1.5	1.7	.73	.60	6.7	1.8	.14	.10	3.3	.05
6	7.1	3.2	2.6	1.6	.62	.55	4.1	1.7	.12	.10	.41	.07
7	4.5	2.5	10	1.4	.59	.57	3.2	1.7	.13	.08	.08	.06
8	3.3	2.0	6.1	1.4	.60	5.3	2.7	4.0	.13	.08	.04	.06
9	6.4	1.9	3.7	1.3	.85	3.9	49	2.3	.15	.08	.04	.06
10	146	6.4	1.9	4.4	.81	3.4	16	1.9	.19	.07	.03	.06
11	81	14	1.5	12	.56	7.8	5.6	1.7	.13	.08	.04	.05
12	32	40	1.3	24	.84	2.6	3.9	2.8	.12	.08	.04	.06
13	19	8.3	6.6	11	.57	2.3	3.2	21	.11	.07	.04	.06
14	7.9	5.2	5.0	4.2	.52	6.2	3.5	1.8	.12	.07	.04	.08
15	5.3	3.7	3.9	2.9	.56	3.8	3.5	.82	.12	.06	.05	.10
16	3.9	3.0	3.4	2.1	1.3	4.3	2.6	.55	.12	.15	.05	.03
17	3.2	2.3	3.0	1.5	1.1	42	2.2	.41	.11	.24	.04	.08
18	2.4	2.1	2.4	5.6	.60	37	2.0	.51	.10	.07	.04	.35
19	1.9	1.9	2.0	7.5	.52	6.6	1.8	.42	.10	.07	.05	.04
20	1.7	1.7	1.8	3.2	.54	4.9	1.7	.32	.10	.07	.05	.04
21	1.4	1.6	1.6	2.3	.56	82	1.6	1.8	.10	.07	.05	.04
22	1.3	1.5	1.2	2.2	3.2	14	1.5	.76	.10	.07	.05	.04
23	1.3	1.4	1.5	2.4	3.1	6.0	1.4	.41	.09	.13	.05	.04
24	2.0	1.4	2.7	1.8	1.4	7.3	1.3	.32	.09	.09	.05	.04
25	1.4	1.3	56	1.3	1.0	32	1.3	.27	.08	.08	.05	.05
26	1.2	65	33	1.5	.81	5.8	1.3	.20	.09	.08	.05	.07
27	1.2	36	15	1.3	.77	3.9	1.6	.17	.10	.08	.05	.05
28	1.5	6.3	10	1.0	.83	3.1	16	.16	.09	.08	.05	.05
29	1.5	3.5	7.0	1.2	.61	18	8.5	.14	.10	.18	.05	.06
30	1.3	2.7	4.7	.94	---	9.0	4.3	.15	.16	.13	.05	.07
31	.95	---	3.4	.83	---	43	---	.17	---	.12	.05	---
TOTAL	621.05	266.78	200.4	111.57	27.15	358.31	218.9	60.28	3.92	3.03	5.59	1.96
MEAN	20.0	8.89	6.46	3.60	.94	11.6	7.30	1.94	.13	.098	.18	.065
MAX	147	65	56	24	3.2	82	49	21	.41	.24	3.3	.35
MIN	.95	.98	1.2	.83	.52	.51	1.3	.14	.08	.06	.03	.03
CFSM	10.1	4.49	3.26	1.82	.48	5.86	3.69	.98	.07	.05	.09	.03
IN.	11.66	5.01	3.76	2.10	.51	6.73	4.11	1.13	.07	.06	.10	.04

CAL YR 1979 TOTAL 4883.13 MEAN 13.4 MAX 335 MIN .08 CFSM 6.77 IN 91.70
WTR YR 1980 TOTAL 1878.94 MEAN 5.13 MAX 147 MIN .03 CFSM 2.59 IN 35.28

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

LOCATION.--Lat 40°32'48", long 74°41'48", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive in South Branch, 0.8 mi (1.3 km) upstream from mouth, and 2.7 mi (4.3 km) southeast of Readington.

DRAINAGE AREA.--265 mi² (686 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1100	497	205	--	12.0	10.1	2.0	230	49	70
FEB 13...	1030	--	268	7.0	.0	13.7	--	<20	<2	96
APR 08...	1145	712	184	7.1	8.0	11.2	1.5	50	23	65
MAY 20...	1230	363	208	7.4	18.5	9.4	2.6	490	49	73
JUL 02...	1330	243	249	8.4	25.0	9.2	<.1	49	130	90
AUG 07...	1145	232	225	8.4	26.5	8.4	<.1	--	--	89
SEP 18...	1215	370	187	8.6	21.5	9.0	E1.8	3500	920	72

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	17	6.6	8.9	1.7	53	.0	22	12	.1
FEB 13...	24	8.7	14	1.4	60	--	29	20	.1
APR 08...	16	6.1	8.3	1.4	37	--	21	12	.1
MAY 20...	17	7.4	11	1.3	48	.2	24	13	.1
JUL 02...	22	8.5	10	1.8	62	--	25	17	.1
AUG 07...	22	8.3	10	1.8	66	--	24	13	.2
SEP 18...	18	6.6	9.5	2.0	47	--	26	13	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	12	122	1.5	.300	.00	.30	1.8	.08	1.8
FEB 13...	9.9	158	2.2	--	--	--	--	.31	3.0
APR 08...	9.6	106	2.0	.360	.14	.50	2.5	.11	9.8
MAY 20...	9.3	134	1.7	.100	.53	.63	2.3	.12	5.6
JUL 02...	9.0	155	1.3	.120	.31	.43	1.7	.27	.8
AUG 07...	8.6	134	.66	.150	.57	.72	1.4	.40	3.6
SEP 18...	2.5	106	.75	.110	.38	.49	1.2	.40	3.6

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 09...	1100	50	1	2	0	30	0	<10	10	10
MAY 20...	1230	110	1	--	10	20	0	--	<10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT 09...	3	20	360	16000	1	10	20	910	<.5	.00
MAY 20...	6	--	260	--	2	--	40	--	<.5	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	1	0	0	0	70	0	4	.0	.0	4
MAY 20...	9	0	--	0	--	2	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 09...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
MAY 20...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 20...	--	--	--	--	--	--	--	--	--	--

01398107 HOLLAND BROOK AT READINGTON, NJ

LOCATION.--Lat 40°33'30", long 74°43'50", Somerset County, Hydrologic Unit 02030105, on right bank 15 ft (4.6 m) downstream from bridge on Old York Road, 0.9 mi (1.4 km) southeast of Readington, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--9.51 mi² (24.63 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder above a concrete parking-block control. Datum of gage is 77.65 ft (23.668 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft³/s (25.3 m³/s) revised, Jan. 24, 1979, gage height, 6.47 ft (1.972 m); minimum, 0.22 ft³/s (0.006 m³/s) Aug. 28, 1980, gage height, 1.61 ft (0.491 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1600	446	12.6	4.61	1.405
Mar. 21	1510	*843	23.9	6.26	1.908

Minimum discharge, 0.22 ft³/s (0.006 m³/s) Aug. 28, gage height, 1.61 ft (0.491 m).

REVISIONS.--The peak discharges and annual maximum (*) for water years 1978 and 1979 have been revised as shown in the following table. They supersede figures published in the reports for 1978 and 1979.

Water year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Water year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1978a	Aug. 11, 1978	1505	814	23.1	6.14	1.871	1979	Feb. 26, 1979	0655	591	16.7	5.17	1.576
1979	Jan. 8, 1979	1050	449	12.7	4.54	1.384		May 25, 1979	0545	435	12.3	4.48	1.366
	Jan. 21, 1979	0640	703	19.9	5.65	1.722		Sept. 22, 1979	0150	424	12.0	4.43	1.350
	Jan. 24, 1979	2305	*895	25.3	6.47	1.972							

a Period June 7 to Sept. 30, 1978; maximum for year probably occurred January 26, 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	5.5	11	8.9	5.0	4.1	96	24	6.0	2.9	2.0	.78
2	53	5.4	9.8	8.3	4.7	3.9	47	19	3.9	2.5	1.7	.80
3	44	50	8.4	7.4	4.4	3.8	34	16	7.0	2.6	1.7	.82
4	32	31	7.8	6.5	4.5	4.0	59	14	3.8	2.3	1.6	1.6
5	30	22	7.0	6.5	4.2	4.4	38	12	3.3	2.3	1.7	1.5
6	24	18	7.7	5.6	3.8	4.1	28	12	3.7	2.9	1.6	1.5
7	20	15	12	5.8	4.0	3.9	23	11	5.0	2.0	1.3	1.1
8	16	12	8.4	5.3	3.7	12	20	16	6.5	2.0	1.6	.77
9	16	10	7.8	4.9	3.7	16	94	12	8.0	2.0	1.8	.76
10	49	13	7.8	4.4	3.7	10	73	11	6.0	1.9	1.5	.91
11	43	15	7.3	25	3.5	17	37	10	5.5	1.8	1.4	.75
12	33	39	6.9	42	3.5	12	27	12	4.3	2.0	1.6	.68
13	25	28	14	25	3.2	11	22	70	3.7	1.6	1.4	.61
14	20	22	14	20	3.2	13	23	40	3.5	1.3	1.6	1.1
15	17	17	14	17	3.4	11	22	15	3.3	1.1	1.9	1.6
16	14	15	13	13	4.6	14	18	11	3.3	.96	2.0	1.2
17	12	12	13	11	3.8	45	15	11	3.3	1.1	1.6	2.0
18	10	11	10	14	3.2	93	14	11	2.6	.86	1.5	6.6
19	9.1	9.3	9.6	30	3.2	41	13	11	2.6	.62	1.5	1.3
20	8.5	8.5	8.4	22	3.3	30	12	11	2.8	.54	1.4	1.1
21	8.0	7.9	7.7	18	3.7	271	11	18	3.1	.47	1.3	1.1
22	7.4	6.8	7.4	15	7.2	89	10	9.4	2.9	.52	1.1	.97
23	7.0	5.4	8.0	14	14	38	9.5	8.6	2.6	.95	1.1	.83
24	7.9	5.2	12	10	7.9	30	9.0	6.4	2.4	.75	1.0	.60
25	6.9	4.8	40	9.4	6.6	65	8.6	5.0	2.2	.69	.77	.79
26	6.4	34	31	8.1	5.5	34	8.3	4.0	2.0	.69	.74	1.1
27	6.0	31	22	7.4	5.4	26	8.7	3.5	2.0	.82	.67	.58
28	7.3	24	17	7.0	4.9	23	44	3.0	2.0	.77	.37	.54
29	6.6	18	14	6.2	4.1	40	44	2.7	2.5	4.3	.66	.55
30	5.8	14	12	5.7	---	41	32	2.6	7.6	3.0	.93	.56
31	5.6	---	10	5.4	---	130	---	3.5	---	2.2	.84	---
TOTAL	648.5	509.8	379.0	388.8	135.9	1140.2	900.1	415.7	117.4	50.44	41.88	35.10
MEAN	20.9	17.0	12.2	12.5	4.69	36.8	30.0	13.4	3.91	1.63	1.35	1.17
MAX	98	50	40	42	14	271	96	70	8.0	4.3	2.0	6.6
MIN	5.6	4.8	6.9	4.4	3.2	3.8	8.3	2.6	2.0	.47	.37	.54
CFSM	2.20	1.79	1.28	1.31	.49	3.87	3.16	1.41	.41	.17	.14	.12
IN.	2.54	1.99	1.48	1.52	.53	4.46	3.52	1.63	.46	.20	.16	.14

CAL YR 1979 TOTAL 9876.30 MEAN 27.1 MAX 504 MIN 1.0 CFSM 2.85 IN 38.63
WTR YR 1980 TOTAL 4762.82 MEAN 13.0 MAX 271 MIN .37 CFSM 1.37 IN 18.63

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ

LOCATION.--Lat 40°46'16", long 74°37'34", Morris County, Hydrologic Unit 02030105, at bridge on State Route 24, 0.8 mi (1.3 km) upstream from Burnett Brook, and 3.8 mi (6.1 km) east of Chester.

DRAINAGE AREA.--7.57 mi² (19.61 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1030	155	7.5	11.5	9.8	5.0	80	170	53
FEB 20...	1100	232	6.8	1.0	12.9	--	<20	<2	61
APR 09...	0930	123	6.8	10.0	10.8	2.4	3500	540	32
MAY 21...	1030	160	7.4	14.0	12.0	2.3	1300	280	46
JUL 07...	1030	205	6.1	15.5	9.0	2.8	170	1600	62
AUG 06...	1000	184	6.8	21.5	7.7	4.8	2400	>2400	55
SEP 17...	0940	358	7.3	15.0	5.1	<.3	80	2400	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	13	4.9	10	1.5	35	--	15	16	.1
FEB 20...	15	5.8	16	1.4	31	--	17	28	.1
APR 09...	8.3	2.8	8.2	1.1	26	--	11	14	.1
MAY 21...	11	4.5	12	1.1	26	.9	14	17	.1
JUL 07...	15	5.9	12	2.0	45	--	16	19	.1
AUG 06...	15	4.2	6.2	2.1	33	--	13	21	.1
SEP 17...	24	9.7	25	4.1	61	.0	24	26	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	17	111	1.2	.670	.32	.99	2.2	.57	1.6
FEB 20...	18	129	1.8	1.230	--	--	--	1.0	1.6
APR 09...	9.4	82	.80	.160	.72	.88	1.7	.50	4.5
MAY 21...	15	108	1.1	.220	.66	.88	2.0	.40	4.3
JUL 07...	16	134	1.7	.190	.50	.69	2.4	1.0	2.8
AUG 06...	13	145	1.2	.170	.61	.78	2.0	.74	4.2
SEP 17...	23	222	2.9	2.300	.10	2.4	5.3	4.6	5.1

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 09...	1030	500	.0	2.6	--	--	0	--	--	--	<10
MAY 21...	1030	--	--	--	30	1	--	0	--	0	--
SEP 17...	0940	700	.7	7.2	20	0	0	0	150	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 09...	--	0	<10	--	<10	--	9500	--	10	--	190
MAY 21...	10	--	--	3	--	530	--	2	--	40	--
SEP 17...	20	10	<10	5	<10	500	5600	1	80	40	310

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	--	.00	--	<10	--	0	--	30	--	30	--
MAY 21...	.2	--	1	--	0	--	30	--	--	--	--
SEP 17...	.1	.00	46	<10	0	0	80	50	0	54	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	.0	0	1.0	1.0	3.6	.0	.0	--	.0	.0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	9	1.7	8.1	.0	.0	.4	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	.0	.0	.0	.0	.0	.0	--	.0	--	0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ

LOCATION.--Lat 40°42'30", long 74°38'11", Somerset County, Hydrologic Unit 02030105, on left bank 75 ft (23 m) upstream from Ravine Lake Dam, 1.6 mi (2.6 km) north of Far Hills, and 2.3 mi (3.7 km) upstream from Peapack Brook. Water-quality samples collected at bridge 900 ft (274 m) downstream from gage.

DRAINAGE AREA.--26.2 mi² (67.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1975, October 1977 to current year. Operated as crest-stage gage water years 1976-77. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23, 1924-25(M), 1935(M). WSP 1902: 1954.

GAGE.--Water-stage recorder above masonry dam. Datum of gage is 224.49 ft (68.425 m) National Geodetic Vertical Datum of 1929 (New Jersey Geological Survey bench mark). Prior to June 18, 1925, nonrecording gage in stilling box at left end of dam at same datum.

REMARKS.--Water-discharge records fair. Records given herein include diversion by small turbine at dam and returned to river 1,000 ft (300 m) downstream from Ravine Lake Dam. Flow regulated occasionally by operation of waste gate in dam.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

AVERAGE DISCHARGE.--57 years (water years 1922-75, 1978-80) 48.0 ft³/s (1.359 m³/s), 24.88 in/yr (632 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,390 ft³/s (181 m³/s) Aug. 28, 1971, gage height, 7.28 ft (2.219 m), from rating curve extended above 2,000 ft³/s (57 m³/s) on basis of computation of peak flow over dam; no flow at times when Ravine Lake was filling.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stage of 7.6 ft (2.3 m), from floodmark, occurred July 23, 1919, discharge about 7,000 ft³/s (200 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 11	2230	1030	29.2	3.82	1.164	Apr. 9	1415	1030	29.2	3.76	1.146
Mar. 21	1645	*2500	70.8	5.07	1.545	Apr. 28	1530	753	21.3	3.43	1.045

Minimum discharge, 3.2 ft³/s (0.091 m³/s) Sept. 14, 15, 20, 22, gage height, 1.79 ft (0.546 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	40	45	42	26	17	330	88	68	26	12	5.6
2	67	40	43	41	31	25	210	79	50	20	17	5.3
3	59	183	41	40	29	25	174	75	62	20	25	5.1
4	54	59	41	38	31	25	293	70	60	20	16	5.0
5	50	47	41	38	29	24	168	65	42	18	15	5.0
6	51	43	45	36	29	24	143	63	38	53	41	5.7
7	46	42	80	36	28	23	128	63	44	24	20	5.3
8	45	41	48	36	28	28	120	102	42	19	13	4.7
9	45	40	45	34	27	38	393	70	40	17	11	4.6
10	81	46	44	31	27	30	259	64	58	16	10	4.8
11	70	48	43	152	28	41	157	61	42	16	9.2	4.5
12	59	79	42	212	28	30	139	87	36	16	11	4.4
13	57	48	62	55	26	27	125	198	32	15	9.7	4.5
14	48	44	55	51	26	30	148	88	31	13	8.3	3.8
15	47	42	43	52	27	36	151	74	29	13	8.4	3.5
16	46	41	43	48	33	33	112	68	28	13	8.5	3.5
17	45	40	51	45	29	42	99	66	27	16	7.7	3.5
18	44	40	43	45	25	387	92	67	26	15	7.2	5.7
19	43	40	41	66	26	88	92	67	25	13	7.4	4.3
20	43	40	40	50	29	68	89	64	24	12	8.6	3.4
21	43	39	38	46	33	692	85	70	23	11	9.2	3.4
22	46	38	39	44	36	255	72	63	22	11	8.0	6.0
23	46	37	41	45	42	146	66	54	20	19	7.7	14
24	53	37	50	42	43	124	63	52	19	17	7.0	7.7
25	48	37	119	39	36	235	60	48	19	14	6.3	5.3
26	46	186	59	38	31	147	60	43	17	13	6.0	5.7
27	44	84	49	37	27	136	69	41	17	12	5.9	5.2
28	56	54	46	37	27	127	282	40	17	12	5.7	4.8
29	59	50	46	36	21	188	160	39	17	12	5.7	4.8
30	45	47	44	32	---	171	103	38	52	20	5.7	5.1
31	42	---	43	31	---	261	---	43	---	14	5.7	---
TOTAL	1633	1652	1510	1575	858	3523	4442	2110	1027	530	338.9	154.2
MEAN	52.7	55.1	48.7	50.8	29.6	114	148	68.1	34.2	17.1	10.9	5.14
MAX	105	186	119	212	43	692	393	198	68	53	41	14
MIN	42	37	38	31	21	17	60	38	17	11	5.7	3.4
CFSM	2.01	2.10	1.86	1.94	1.13	4.35	5.65	2.60	1.31	.65	.42	.20
IN.	2.32	2.35	2.14	2.24	1.22	5.00	6.31	3.00	1.46	.75	.48	.22

CAL YR 1979 TOTAL 26218.0 MEAN 71.8 MAX 968 MIN 15 CFSM 2.74 IN 37.22
WTR YR 1980 TOTAL 19353.1 MEAN 52.9 MAX 692 MIN 3.4 CFSM 2.02 IN 27.48

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 09...	1230	46	153	7.7	13.0	10.2	2.0	50	5
MAR 05...	0945	23	204	7.0	3.5	13.0	<.5	<20	<2
APR 09...	1045	255	138	6.8	10.0	9.4	1.2	20	12
MAY 21...	1230	73	153	7.7	15.5	10.7	3.8	40	2
JUL 07...	0920	25	140	7.8	20.0	8.2	2.8	130	920
AUG 06...	1115	47	190	7.6	25.0	7.8	5.4	<20	2400
SEP 17...	1130	3.5	205	7.4	19.0	7.2	<.1	50	240

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	53	13	4.9	7.2	1.3	33	15	12	.1
MAR 05...	55	13	5.4	14	1.2	37	19	25	.1
APR 09...	41	10	3.9	7.5	1.0	34	15	13	.1
MAY 21...	48	11	5.0	9.5	.9	30	16	12	.1
JUL 07...	56	14	5.2	8.1	1.5	43	16	13	.1
AUG 06...	61	15	5.7	8.8	1.7	47	15	15	.2
SEP 17...	72	18	6.5	10	1.7	51	16	15	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	16	100	--	--	--	--	--	.10	1.7
MAR 05...	15	125	1.3	.300	.33	.63	1.8	.20	3.2
APR 09...	14	95	1.0	.110	.33	.44	1.4	<.01	2.4
MAY 21...	16	105	.92	.090	.30	.39	1.3	.11	2.6
JUL 07...	15	112	.76	.160	.68	.84	1.6	.18	5.2
AUG 06...	15	121	.44	.160	.83	.99	1.4	.37	4.4
SEP 17...	15	133	.20	.170	3.1	3.3	3.5	.18	3.0

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'09", long 74°40'56", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 0.1 mi (0.2 km) upstream from Lamington River, and 4.0 mi (6.4 km) southwest of Far Hills.

DRAINAGE AREA.--63.8 mi^2 (165.2 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1400	38	200	8.3	13.0	11.5	1.0	130	130	69
MAR 05...	1100	38	238	7.0	1.5	14.5	<.5	<20	33	70
APR 14...	1150	340	163	7.0	10.5	10.7	.9	630	540	49
MAY 21...	1400	164	204	7.6	15.0	10.5	2.2	3500	>2400	63
JUL 07...	1230	38	195	8.0	20.0	11.6	2.1	1300	350	65
AUG 06...	1215	62	200	6.7	24.0	8.0	2.7	9200	>2400	69
SEP 17...	1220	--	273	7.9	18.0	10.4	5.2	1700	920	100

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	17	6.4	8.9	1.7	44	--	21	12	.1
MAR 05...	17	6.7	15	1.2	48	--	21	24	.1
APR 14...	12	4.6	8.4	1.1	30	--	18	13	.1
MAY 21...	15	6.3	14	1.0	43	.0	18	18	.1
JUL 07...	16	6.1	9.5	1.6	54	--	18	14	.1
AUG 06...	17	6.4	9.3	1.9	50	--	15	15	.2
SEP 17...	25	9.5	14	2.1	72	.0	22	19	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	13	110	<1.0	.280	.17	.45	--	.10	1.9
MAR 05...	12	137	1.4	.210	.27	.48	1.9	.21	1.9
APR 14...	13	93	1.0	.080	.33	.41	1.4	.26	1.2
MAY 21...	13	135	1.0	.320	.17	.49	1.5	.11	3.3
JUL 07...	14	120	.76	.120	.00	.12	.88	.16	--
AUG 06...	14	121	1.0	.160	.66	.82	1.8	.58	4.9
SEP 17...	12	181	1.2	.110	.71	.82	2.0	.49	3.5

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
MAY 21...	1400	--	--	--	10	1	--	0	6	0	--
SEP 17...	1220	1600	.0	13	20	1	0	0	80	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
MAY 21...	20	--	--	4	--	350	--	11	--	60	--
SEP 17...	20	30	<10	3	<10	300	3500	1	10	30	270

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	.2	--	1	--	0	--	30	--	--	--	--
SEP 17...	<.1	.00	42	10	0	0	30	40	0	7	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01399190 LAMINGTON (BLACK) RIVER AT SUCCASUNNA, NJ

LOCATION.--Lat 40°51'03", long 74°38'02", Morris County, Hydrologic Unit 02030105, on right bank, 10 ft (3 m) upstream from bridge on Righter Road, 0.7 mi (1.1 km) south of Succasunna, and 0.4 mi (0.6 km) upstream from Succasunna Brook.

DRAINAGE AREA.--7.37 mi² (19.09 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of the gage is 695 ft (212 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 176 ft³/s (4.98 m³/s) Jan. 24, 1979, gage height, 5.20 ft (1.585 m); minimum discharge 1.2 ft³/s (0.034 m³/s) Sept. 11, 12, 1980, gage height, 2.27 ft (0.692 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	1745	45	1.27	3.88	1.183
Jan. 11	2145	50	1.42	3.97	1.210
Mar. 21	1800	*68	1.93	4.24	1.292
Apr. 9	1515	54	1.53	4.03	1.228
Apr. 29	0945	51	1.44	3.98	1.213

Minimum discharge, 1.2 ft³/s (0.03 m³/s) Sept. 11, 12, gage height, 2.27 ft (0.692 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	9.8	18	12	8.6	6.7	34	38	12	6.0	3.3	2.0
2	22	9.4	16	11	8.3	6.4	33	32	10	5.2	4.4	1.9
3	23	27	14	11	8.0	6.1	29	28	12	5.3	5.3	1.6
4	22	26	13	11	8.0	6.1	34	25	12	5.6	4.4	1.5
5	19	21	13	11	8.0	6.2	34	23	9.6	6.5	3.7	1.6
6	18	17	13	10	7.8	6.4	30	21	8.3	8.9	4.6	1.6
7	16	15	18	10	7.8	6.2	26	20	8.3	7.0	3.7	1.7
8	15	13	16	9.9	7.7	6.6	24	22	8.4	5.7	3.3	1.7
9	15	12	15	9.6	7.6	7.2	39	20	8.2	5.3	3.1	1.5
10	20	14	13	9.4	7.5	6.7	50	19	9.1	4.9	3.1	1.4
11	22	16	12	19	7.4	7.6	44	18	8.6	4.8	2.9	1.3
12	21	19	11	36	7.4	7.2	38	20	7.7	5.0	2.6	1.3
13	20	17	15	26	7.3	6.9	33	25	7.0	5.0	2.5	1.4
14	18	14	15	21	7.3	13	31	22	6.8	4.7	2.4	1.5
15	16	12	14	19	7.2	7.8	34	18	6.7	4.2	2.4	1.9
16	14	11	13	17	7.9	7.2	32	16	6.2	5.5	2.4	1.9
17	13	11	14	15	7.9	8.9	28	14	5.6	5.6	2.5	1.8
18	13	11	11	14	7.4	22	25	14	5.1	5.1	2.4	2.7
19	12	9.7	12	17	7.3	20	24	13	5.0	4.8	2.1	1.8
20	13	9.1	12	15	7.3	16	23	12	5.2	4.8	2.4	1.7
21	13	9.0	11	13	7.3	37	22	14	5.2	4.6	2.3	1.7
22	12	9.4	11	12	7.8	52	20	14	5.2	4.0	2.2	1.6
23	11	9.1	11	12	8.5	41	19	13	4.8	4.5	2.1	1.5
24	12	8.5	13	11	8.7	33	19	12	4.3	4.1	2.3	1.4
25	11	8.9	21	10	8.6	37	19	11	4.2	3.7	2.3	1.5
26	10	26	20	10	8.1	31	19	9.9	4.0	3.5	2.0	1.6
27	10	35	16	10	7.5	26	19	8.8	3.9	3.5	1.8	1.4
28	13	29	14	10	7.4	23	34	7.7	3.9	3.2	1.8	1.4
29	13	23	13	9.8	7.4	25	47	7.5	4.1	3.3	1.8	1.3
30	12	20	12	9.4	---	25	44	7.3	8.3	3.7	1.8	1.4
31	11	---	12	9.1	---	28	---	8.5	---	3.4	1.9	---
TOTAL	478	471.9	432	420.2	225.0	539.2	907	533.7	209.7	151.4	85.8	48.6
MEAN	15.4	15.7	13.9	13.6	7.76	17.4	30.2	17.2	6.99	4.88	2.77	1.62
MAX	23	35	21	36	8.7	52	50	38	12	8.9	5.3	2.7
MIN	10	8.5	11	9.1	7.2	6.1	19	7.3	3.9	3.2	1.8	1.3
CFSM	2.09	2.13	1.89	1.85	1.05	2.36	4.10	2.33	.95	.66	.38	.22
IN.	2.41	2.38	2.18	2.12	1.14	2.72	4.58	2.69	1.06	.76	.43	.25

CAL YR 1979 TOTAL 6150.1 MEAN 16.8 MAX 108 MIN 5.7 CFSM 2.28 IN 31.04
WTR YR 1980 TOTAL 4502.5 MEAN 12.3 MAX 52 MIN 1.3 CFSM 1.67 IN 22.72

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ

LOCATION.--Lat 40°50'07", long 74°38'40", Morris County, Hydrologic Unit 02030105, on left bank 15 ft (4.5 m) upstream from bridge on Ironia Road, 1.0 mi (1.6 km) below Succasunna Brook, 1.3 mi (2.1 km) northwest of Ironia, and 4.4 mi (7.1 km) northeast of Chester.

DRAINAGE AREA.--10.9 mi^2 (28.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of gage is 681 ft (208 m), from topographic map.

REMARKS.--Water-discharge records poor. Water for municipal supply pumped from wells upstream of gage by Morris County Municipal Utilities Authority.

AVERAGE DISCHARGE.--5 years, 20.8 ft^3/s (0.589 m^3/s), 25.92 in/yr (658 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 348 ft^3/s (9.86 m^3/s) Jan. 25, 1979, gage height, 5.27 ft (1.606 m); minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) Sept. 11, 12, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft^3/s (2.27 m^3/s) and maximum(*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Jan. 12	0900	88	2.35	3.65	1.113	Apr. 10	0045	99	2.80	3.53	1.076
Mar. 22	0145	*149	4.22	4.01	1.222	Apr. 29	0545	85	2.41	3.33	1.015

Minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) Sept. 11, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	11	26	20	14	11	62	55	25	12	8.1	3.3
2	33	11	24	18	14	9.9	62	48	17	8.0	11	3.2
3	28	30	23	17	13	9.6	51	42	21	7.3	20	2.5
4	29	39	21	16	13	8.6	56	38	27	7.1	16	2.1
5	25	30	21	16	13	9.1	59	34	15	7.1	13	2.3
6	23	23	22	17	12	9.6	49	29	11	22	20	2.7
7	20	20	30	15	12	9.6	43	28	11	12	16	2.6
8	19	17	28	15	13	11	38	37	12	7.6	11	2.7
9	18	16	25	14	13	15	60	33	11	6.4	9.0	2.1
10	22	18	22	14	13	13	89	27	17	5.6	8.1	1.8
11	29	22	20	22	12	16	67	25	14	5.3	7.5	1.6
12	28	27	19	75	12	14	57	32	10	6.1	6.6	1.6
13	26	26	24	70	12	10	51	51	8.5	5.9	5.6	1.7
14	24	21	30	57	12	18	49	41	7.7	5.4	4.7	1.8
15	21	18	25	35	12	14	55	29	7.5	4.3	4.7	2.1
16	18	15	22	30	14	11	51	24	6.8	9.7	4.8	2.1
17	16	14	25	27	15	13	44	21	5.7	11	4.2	2.0
18	15	13	20	26	14	65	39	21	5.2	8.9	4.0	4.2
19	15	13	18	32	13	54	36	21	5.0	7.2	3.3	3.7
20	14	12	20	29	13	30	35	19	5.7	6.9	3.4	3.2
21	13	11	19	24	14	63	33	23	5.5	6.3	3.9	3.0
22	13	11	18	23	15	124	29	23	5.1	5.2	3.5	2.9
23	12	12	19	23	17	78	28	19	4.8	9.1	3.5	2.3
24	13	11	26	22	20	60	28	17	4.0	9.1	3.6	2.0
25	12	11	37	18	20	64	28	16	3.9	6.7	3.8	1.9
26	11	28	38	18	18	56	27	13	3.8	5.4	3.2	2.2
27	10	58	30	17	16	45	29	11	3.8	5.6	2.8	1.9
28	13	41	24	17	15	39	52	9.5	3.8	5.6	2.5	1.9
29	19	34	22	17	14	41	83	9.2	4.4	6.3	2.7	1.9
30	15	29	21	16	---	46	68	8.9	18	11	2.8	1.7
31	12	---	20	15	---	47	---	10	---	9.4	3.0	---
TOTAL	585	642	739	775	408	1014.4	1458	814.6	300.2	245.5	216.3	71.0
MEAN	18.9	21.4	23.8	25.0	14.1	32.7	48.6	26.3	10.0	7.92	6.98	2.37
MAX	33	58	38	75	20	124	89	55	27	22	20	4.2
MIN	10	11	18	14	12	8.6	27	8.9	3.8	4.3	2.5	1.6
CFSM	1.73	1.96	2.18	2.29	1.29	3.00	4.46	2.41	.92	.73	.64	.22
IN.	2.00	2.19	2.52	2.64	1.39	3.46	4.98	2.78	1.02	.84	.74	.24

CAL YR 1979 TOTAL 10146.0 MEAN 27.8 MAX 241 MIN 8.0 CFSM 2.55 IN 34.62
WTR YR 1980 TOTAL 7269.0 MEAN 19.9 MAX 124 MIN 1.6 CFSM 1.83 IN 24.81

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection Division of Water Resources. Anayses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were preformed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 01...	1030	15	298	7.2	16.5	6.1	--	80	49	84
FEB 20...	0945	12	370	7.3	.0	11.5	2.2	<20	5	100
APR 10...	0930	92	212	6.8	8.0	6.8	1.0	330	130	50
MAY 21...	1000	21	310	7.0	15.5	6.4	5.0	790	32	79
JUL 07...	0915	13	290	7.2	18.0	7.1	3.2	490	240	92
AUG 06...	0930	21	288	7.0	18.0	5.9	3.0	3500	700	72
SEP 17...	0945	1.4	455	6.2	17.0	3.2	E5.7	330	350	110

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 01...	21	7.7	24	2.3	66	--	15	30	.1
FEB 20...	25	9.8	31	2.2	83	--	25	39	.2
APR 10...	12	4.8	19	1.5	47	--	13	25	.1
MAY 21...	18	8.3	36	1.6	63	.1	19	38	.1
JUL 07...	21	9.5	30	2.1	76	--	22	33	.1
AUG 06...	16	7.7	29	2.0	60	--	19	32	.1
SEP 17...	25	11	44	5.8	75	.0	29	47	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	13	173	1.6	.600	.30	.90	2.5	1.1	6.2
FEB 20...	12	206	2.8	.340	--	--	--	1.2	4.7
APR 10...	7.0	126	1.0	.460	.17	.63	1.6	.85	5.0
MAY 21...	9.2	172	1.4	.290	1.1	1.4	2.8	1.3	7.9
JUL 07...	8.4	183	1.2	.260	.60	.86	2.1	1.0	3.9
AUG 06...	8.7	170	1.0	.250	.37	.62	1.6	.83	5.1
SEP 17...	16	273	6.0	1.300	1.1	2.4	8.4	6.7	--

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
MAY 21...	1000	--	--	--	30	0	--	0	30	0	--
SEP 17...	0945	110	.0	2.3	20	0	0	0	220	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
MAY 21...	10	--	--	6	--	720	--	7	--	280	--
SEP 17...	10	40	<10	5	<10	250	640	1	<10	50	19

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	.2	--	1	--	0	--	20	--	--	--	--
SEP 17...	.6	.00	17	<10	0	0	20	10	2	2	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'39", long 74°43'50", Morris County, Hydrologic Unit 02030105, on right bank 1.1 mi (1.8 km) upstream from bridge on State Highway 512, 1.2 mi (1.9 km) northwest of Pottersville, and 5.5 mi (8.8 km) upstream from Cold Brook. Water-quality sample collected at bridge 1.1 mi (1.8 km) downstream from gage at high flows.

DRAINAGE AREA.--32.8 mi^2 (85.0 km^2).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October and November 1921, published in WSP 1302. Prior to October 1952, published as "Black River near Pottersville".

REVISED RECORDS.--WSP 741: 1932. WSP 781: Drainage area. WSP 1552: 1922, 1924-29(M), 1931(M), 1933-34(M), 1938(P), 1939(M), 1940, 1941(M), 1942-46(P), 1947(M), 1948-49(P), 1951-52(P), 1953(M).

GAGE.--Water-stage recorder. Concrete control since July 1, 1937. Datum of gage is 284.14 ft (86.606 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to July 1, 1922, nonrecording gage on downstream side of highway bridge at Pottersville, 1.1 mi (1.8 km) downstream at different datum.

REMARKS.--Water-discharge records good. No gage-height record July 22 to Sept. 4. Flow regulated occasionally by pond above station.

AVERAGE DISCHARGE.--59 years, 56.2 ft^3/s (1.592 m^3/s), 23.25 in/yr (591 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s (76.5 m^3/s) Aug. 28, 1971, gage height, 5.39 ft (1.643 m), from rating curve extended above 380 ft^3/s (10.8 m^3/s) on basis of slope-area measurement at gage height 4.71 ft (1.436 m); minimum, 1.3 ft^3/s (0.037 m^3/s) Oct. 4, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft^3/s (10.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1430	493	14.0	3.29	1.003	Mar. 21	1315	*620	17.6	3.47	1.058
Nov. 3	0500	403	11.4	3.12	0.951	Apr. 9	1130	482	13.7	3.24	0.988
Jan. 11	2000	384	10.9	3.05	0.930						

Minimum discharge, 5.2 ft^3/s (0.15 m^3/s) Sept. 12-17, gage height, 1.37 ft (0.418 m).

Corrections.--The AVERAGE DISCHARGE and EXTREMES published in the report for Water Year 1979 were actually those for Water Year 1978. The correct EXTREMES for Water Year 1979 are shown below:

EXTREMES FOR 1979 WATER YEAR.--Peak discharges above base of 380 ft^3/s (10.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 8	0245	435	12.3	3.15	0.960	Feb. 26	0430	1600	45.3	4.57	1.393
Jan. 21	1600	711	20.1	3.60	1.097	Sept. 6	0700	1070	30.3	4.06	1.237
Jan. 24	1915	*2620	74.2	5.30	1.615						

Minimum discharge, 13 ft^3/s (0.37 m^3/s) Nov. 13, gage height, 1.53 ft (0.466 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	50	100	62	46	54	188	155	61	28	15	9.0
2	119	51	87	59	39	37	174	130	56	27	20	8.5
3	104	177	77	56	34	38	164	113	64	27	25	7.5
4	107	103	72	52	32	35	203	100	65	24	21	6.4
5	111	90	69	49	33	33	170	90	61	32	18	7.2
6	107	93	71	48	34	31	154	84	59	67	22	7.3
7	89	87	88	46	35	31	140	82	53	40	20	6.6
8	82	78	73	45	35	37	129	96	49	35	17	6.3
9	83	70	71	45	35	49	250	82	49	31	15	6.1
10	108	72	72	46	34	47	239	72	57	25	14	6.1
11	106	74	70	98	33	53	216	75	49	21	14	5.8
12	97	91	67	149	34	46	187	110	46	19	13	5.5
13	96	75	81	109	32	38	161	180	40	17	12	5.2
14	89	73	79	122	32	29	161	150	35	16	12	5.2
15	84	72	70	127	32	39	173	90	31	15	11	5.2
16	79	68	70	107	35	44	145	78	29	14	11	5.2
17	74	64	77	92	34	54	133	74	27	15	11	5.9
18	71	60	71	85	33	199	123	72	25	17	11	12
19	66	57	63	91	32	122	113	72	24	17	11	7.8
20	63	54	59	77	31	128	104	70	25	16	10	7.4
21	60	52	63	72	33	338	97	81	25	15	10	7.4
22	57	51	55	69	44	319	89	75	23	14	10	7.2
23	56	50	59	67	55	257	85	69	22	16	9.5	6.9
24	58	49	71	62	61	213	80	63	21	15	11	6.3
25	53	49	113	58	56	221	76	56	20	14	10	6.4
26	51	160	92	53	50	167	74	51	19	14	9.0	6.9
27	49	142	91	51	49	147	79	46	18	14	8.5	6.0
28	58	122	89	46	41	131	163	43	18	14	8.0	5.9
29	58	130	83	47	47	145	173	40	18	14	8.0	5.8
30	52	116	75	45	---	141	172	38	43	16	8.5	6.2
31	50	---	68	44	---	158	---	40	---	15	9.0	---
TOTAL	2474	2480	2346	2179	1121	3381	4415	2577	1132	664	404.5	201.2
MEAN	79.8	82.7	75.7	70.3	38.7	109	147	83.1	37.7	21.4	13.0	6.71
MAX	137	177	113	149	61	338	250	180	65	67	25	12
MIN	49	49	55	44	31	29	74	38	18	14	8.0	5.2
CFSM	2.43	2.52	2.31	2.14	1.18	3.32	4.48	2.53	1.15	.65	.40	.21
IN.	2.81	2.81	2.66	2.47	1.27	3.83	5.01	2.92	1.28	.75	.46	.23

CAL YR 1979 TOTAL 33258.0 MEAN 91.1 MAX 905 MIN 22 CFSM 2.78 IN 37.72
WTR YR 1980 TOTAL 23374.7 MEAN 63.9 MAX 338 MIN 5.2 CFSM 1.95 IN 26.51

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 01...	1230	76	146	8.1	16.0	9.1	--	3500	1600	46
FEB 27...	0845	63	220	7.2	.0	14.1	<1.0	70	79	55
APR 10...	1050	232	130	6.9	8.0	10.4	.5	330	49	34
MAY 21...	1130	92	171	7.1	15.5	9.3	1.7	490	240	49
JUL 07...	1045	41	162	7.2	18.5	8.2	1.2	1100	>2400	51
AUG 06...	1045	25	208	7.6	18.0	8.2	1.4	170	540	58
SEP 17...	1130	5.9	234	7.1	17.0	10.6	E2.9	<20	540	70

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 01...	11	4.4	9.8	1.5	29	--	7.8	14	.1
FEB 27...	13	5.5	16	1.9	36	--	18	23	.1
APR 10...	8.2	3.3	8.9	1.2	23	--	13	13	.1
MAY 21...	11	5.3	14	1.0	36	--	13	15	.1
JUL 07...	12	5.0	12	1.4	34	--	19	15	.1
AUG 06...	14	5.7	14	1.6	43	--	17	19	.0
SEP 17...	16	7.3	18	2.2	51	.1	17	22	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	10	91	<1.0	.400	.60	1.0	--	.27	7.4
FEB 27...	13	131	1.9	--	--	--	--	.32	2.7
APR 10...	6.4	76	.65	.160	.60	.76	1.4	.77	4.9
MAY 21...	12	--	1.0	.080	.33	.41	1.4	.34	4.1
JUL 07...	12	113	.43	.110	.47	.58	1.0	.45	9.9
AUG 06...	12	122	.81	.240	.46	.70	1.5	.40	4.2
SEP 17...	15	147	1.2	.100	4.5	4.6	5.8	.28	2.2

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
SEP								
17...	1120	30	0	0	60	0	20	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
SEP								
17...	220	2	20	.1	19	0	10	0

01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'16", long 74°45'09", Hunterdon County, Hydrologic Unit 02030105, on right bank along a private dirt road, 400 ft (122 m) downstream from the Pottersville Reservoir, and 1.5 mi (2.4 km) west of Pottersville.

DRAINAGE AREA.--2.18 mi^2 (5.65 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder above a rock outcrop control. Datum of gage is 451.57 ft (137.639 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those above 50 ft^3/s (1.42 m^3/s) and those for period of no gage-height record, Oct. 4-Nov. 5, which are poor. Flow regulated by Pottersville Reservoir 400 ft (122 m) above station.

AVERAGE DISCHARGE.--8 years, 4.04 ft^3/s (0.114 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197 ft^3/s (5.58 m^3/s) July 20, 1975, gage height, 2.85 ft (0.869 m); maximum gage height, 3.17 ft (0.966 m) Jan. 24, 1979, minimum daily discharge, 0.03 ft^3/s (0.001 m^3/s) Aug. 28, 29, Sept. 3, 8, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 125 ft^3/s (3.54 m^3/s) Mar. 21, gage height, 2.78 ft (0.847 m); minimum daily, 0.03 ft^3/s (0.001 m^3/s) Aug. 28, 29, Sept. 3, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	2.3	4.4	3.4	1.8	1.6	18	7.9	3.4	1.5	.59	.08
2	6.2	3.0	4.2	3.1	1.8	1.5	12	6.8	2.8	1.4	1.3	.04
3	4.9	7.6	3.8	2.7	1.7	1.9	9.2	6.0	4.6	1.5	.81	.03
4	5.0	5.0	3.9	2.5	1.8	1.6	19	5.3	2.7	1.3	.53	.05
5	5.3	4.1	3.8	2.6	1.8	1.7	11	5.0	2.1	2.4	.82	.15
6	4.6	3.9	5.0	2.2	1.8	1.7	8.5	4.7	2.0	2.3	.77	.19
7	4.1	3.8	6.6	2.3	1.9	1.7	7.3	5.0	2.2	1.1	.58	.09
8	3.8	3.5	4.1	2.4	1.8	2.3	7.2	9.0	3.5	.96	.47	.03
9	3.8	3.4	3.7	2.3	1.8	2.5	30	5.0	4.6	.82	.49	.04
10	5.1	4.4	3.6	2.3	1.8	2.0	19	4.3	3.9	.77	.40	.06
11	4.9	5.2	3.5	12	1.8	3.1	12	4.4	2.3	.84	.35	.06
12	4.8	6.7	3.4	9.4	1.8	2.0	11	11	2.0	.99	.77	.08
13	4.5	4.1	7.0	4.0	1.8	1.7	9.3	12	1.9	.67	.37	.08
14	4.3	3.7	4.6	4.0	1.7	2.1	13	5.9	1.9	.57	.34	.12
15	4.0	3.4	3.7	4.0	1.8	1.9	14	4.5	1.8	.56	.45	.15
16	3.7	3.2	3.8	3.3	2.1	1.9	8.7	4.0	1.8	.58	.45	.12
17	3.5	3.1	4.2	3.2	1.9	5.6	7.4	3.6	1.6	.97	.28	.23
18	3.2	3.0	3.2	4.1	1.8	20	6.9	4.4	1.6	.63	.24	1.1
19	3.0	2.9	3.2	5.0	1.8	4.0	6.4	4.1	1.6	.57	.24	.25
20	2.8	2.9	3.2	3.2	1.9	3.3	6.0	3.6	1.7	.51	.24	.23
21	2.7	2.8	3.3	2.8	2.2	39	5.5	5.5	1.5	.46	.22	.20
22	2.6	2.8	3.5	2.6	2.1	18	5.1	3.7	1.4	.58	.19	.17
23	2.5	2.8	4.2	2.7	5.3	11	5.0	2.9	1.3	.99	.18	.15
24	2.4	2.8	5.0	2.2	3.1	9.5	4.7	2.8	1.3	.58	.13	.10
25	2.4	2.7	12	2.2	2.4	17	4.6	2.6	1.3	.44	.11	.17
26	2.3	22	5.2	2.1	2.0	8.5	4.4	2.3	1.3	.39	.10	.29
27	2.2	8.4	4.3	2.1	2.0	7.0	6.0	2.2	1.3	.37	.07	.14
28	2.7	6.0	4.0	2.1	1.8	6.3	22	2.2	1.3	.37	.03	.15
29	2.5	5.1	3.8	2.1	1.6	13	21	2.1	1.7	1.3	.03	.15
30	2.4	4.6	3.8	1.9	---	9.2	10	2.1	4.8	.87	.09	.19
31	2.3	---	3.6	1.8	---	16	---	2.6	---	.53	.10	---
TOTAL	125.5	139.2	135.6	102.6	58.9	218.6	324.2	147.5	67.2	27.82	11.74	4.89
MEAN	4.05	4.64	4.37	3.31	2.03	7.05	10.8	4.76	2.24	.90	.38	.16
MAX	17	22	12	12	5.3	39	30	12	4.8	2.4	1.3	1.1
MIN	2.2	2.3	3.2	1.8	1.6	1.5	4.4	2.1	1.3	.37	.03	.03

CAL YR 1979 TOTAL 1886.57 MEAN 5.17 MAX 66 MIN .84
WTR YR 1980 TOTAL 1363.75 MEAN 3.73 MAX 39 MIN .03

01399525 LAMINGTON (BLACK) RIVER TRIBUTARY NO. 2 NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°41'40", long 74°43'05", Somerset County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on Black River Road, 1.3 mi (2.1 km) south of Pottersville, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--1.22 mi² (3.60 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (54.9 m), from topographic map.

REMARKS.--Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 773 ft³/s (21.9 m³/s) Sept. 6, 1979, gage height, 4.98 ft (1.518 m); no flow many days in July, August, and September, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 11	1945	233	6.60	3.21	0.978	Mar. 21	1445	*563	15.9	4.38	1.335

No flow many days in July, August, and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	.92	1.1	1.2	.50	.37	15	1.4	.51	.16	.05	.00
2	3.1	.94	1.0	1.1	.49	.39	4.0	1.1	.34	.13	.08	.00
3	7.8	19	.97	.89	.47	.40	2.7	.93	.68	.15	.12	.00
4	2.8	2.9	.98	.82	.48	.42	13	.78	.44	.15	.05	.00
5	6.4	1.7	.96	.84	.48	.44	3.5	.73	.30	.14	.04	.00
6	2.8	1.5	3.2	.76	.47	.46	1.8	.67	.26	.35	.22	.00
7	1.8	1.2	3.8	.77	.46	.57	1.3	.66	.35	.12	.07	.00
8	1.4	1.2	1.3	.75	.45	3.3	1.2	1.4	.43	.11	.02	.00
9	2.9	1.1	1.2	.68	.44	1.7	26	.69	.70	.10	.01	.00
10	14	1.7	1.1	.64	.43	.65	7.6	.60	.75	.09	.00	.00
11	4.2	3.9	1.0	22	.42	2.3	2.5	.59	.41	.08	.00	.00
12	4.1	6.5	1.0	8.4	.41	.62	1.4	3.1	.34	.09	.01	.00
13	3.1	2.2	5.4	2.0	.40	.53	1.1	5.5	.29	.05	.01	.00
14	1.9	1.7	1.9	2.0	.51	.77	4.1	1.4	.27	.03	.00	.00
15	1.6	1.3	1.2	2.1	.53	.80	3.2	.96	.27	.02	.00	.00
16	1.3	1.2	1.6	1.4	.69	1.2	1.2	.85	.26	.01	.00	.00
17	1.2	1.2	1.9	1.2	.64	20	.97	.75	.21	.06	.00	.00
18	1.2	1.2	1.8	2.8	.52	11	.90	.84	.21	.03	.00	.00
19	1.1	1.1	1.4	5.0	.63	4.7	.81	.78	.21	.01	.00	.00
20	1.1	1.1	1.2	1.8	.73	2.5	.77	.71	.24	.00	.00	.00
21	1.1	1.0	1.1	1.3	.88	87	.70	.91	.22	.00	.00	.00
22	1.1	1.0	1.4	1.2	1.5	10	.63	.59	.18	.01	.00	.00
23	1.1	.99	1.6	1.3	5.0	3.8	.61	.48	.17	.14	.00	.00
24	1.6	.99	4.2	.99	1.2	4.1	.58	.43	.15	.06	.00	.00
25	1.2	.99	11	.71	.85	11	.55	.40	.14	.01	.00	.00
26	1.1	17	8.3	.68	.70	3.1	.54	.34	.12	.00	.00	.00
27	1.0	3.6	3.1	.66	.49	1.8	.66	.31	.13	.00	.00	.00
28	1.8	2.1	2.4	.61	.46	1.2	12	.31	.12	.00	.00	.00
29	1.2	1.5	1.8	.60	.42	9.0	8.9	.30	.13	.10	.00	.00
30	.98	1.2	1.5	.56	---	4.7	2.7	.29	.50	.15	.00	.00
31	.94	---	1.3	.53	---	22	---	.35	---	.04	.00	---
TOTAL	91.92	83.93	71.71	66.29	21.65	210.82	120.92	29.15	9.33	2.39	.68	.00
MEAN	2.97	2.80	2.31	2.14	.75	6.80	4.03	.94	.31	.077	.022	.000
MAX	15	19	11	22	5.0	87	26	5.5	.75	.35	.22	.00
MIN	.94	.92	.96	.53	.40	.37	.54	.29	.12	.00	.00	.00
CFSM	2.43	2.30	1.89	1.75	.61	5.57	3.30	.77	.25	.06	.02	0
IN	2.80	2.56	2.19	2.02	.66	6.43	3.68	.89	.28	.07	.02	0

CAL YR 1979 TOTAL 1314.05 MEAN 3.60 MAX 109 MIN .06 CFSM 2.95 IN 40.06
WTR YR 1980 TOTAL 708.79 MEAN 1.94 MAX 87 MIN .00 CFSM 1.59 IN 21.61

01399545 LAMINGTON RIVER AT LAMINGTON, NJ

LOCATION.--Lat 40°39'38", long 74°43'46", Somerset County, Hydrologic Unit 02030105, at bridge on State Route 523 in Lamington, 0.4 mi (0.6 km) downstream from Cold Brook, and 3.8 mi (6.1 km) south of Potterstown.

DRAINAGE AREA.--53.6 mi² (138.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 01...	1330	865	148	7.4	16.0	9.1	--	--	--
FEB 27...	1000	--	230	7.4	.0	13.8	<1.0	50	79
APR 10...	1200	366	128	6.9	11.0	10.8	1.7	230	350
MAY 21...	1245	171	168	7.1	15.5	9.7	2.6	5400	350
JUL 07...	1145	96	168	7.5	18.5	6.9	1.1	9200	220
AUG 06...	1145	96	194	7.8	19.0	7.6	1.9	1700	>2400
SEP 17...	1245	--	250	7.2	18.0	10.9	<.3	790	220

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 01...	53	13	5.1	7.3	2.0	37	9.6	11	.1
FEB 27...	63	15	6.3	14	1.7	44	19	21	.1
APR 10...	35	8.7	3.3	7.3	1.2	20	13	10	.1
MAY 21...	53	12	5.5	11	1.0	39	13	15	.1
JUL 07...	55	13	5.5	11	1.4	40	18	15	.1
AUG 06...	63	14	6.7	15	1.6	49	15	17	.1
SEP 17...	96	22	10	13	1.7	75	18	16	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 01...	10	97	<1.0	.400	.14	.54	--	1.0	11
FEB 27...	12	132	1.8	--	--	--	--	.17	2.2
APR 10...	7.4	74	.74	.080	--	--	--	.19	3.9
MAY 21...	11	92	.95	.060	.15	.21	1.2	.36	3.9
JUL 07...	12	115	.55	.150	.34	.49	1.0	.36	6.6
AUG 06...	13	127	.89	.200	.41	.61	1.5	.31	4.1
SEP 17...	12	160	.95	.100	.39	.49	1.4	.15	1.9

01399545 LAMINGTON RIVER AT LAMINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)
SEP 17...	1245	3200	.0	15	0	<10	40	<10	<10	1500

DATE	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
SEP 17...	10	53	.00	<10	0	40	3	.0	.0	0

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01399600 SOUTH BRANCH ROCKAWAY CREEK TRIBUTARY AT LEBANON, NJ

LOCATION.--Lat 40°38'05", long 74°49'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road in Lebanon, 0.5 mi (0.8 km) upstream from mouth, and 1.8 mi (2.9 km) west of Potterstown.

DRAINAGE AREA.--1.02 mi² (2.64 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-63, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 07...	0915	.82	162	7.6	7.5	10.8	--	<20	<2
MAR 26...	0900	.87	174	7.0	8.0	11.0	<1.3	<20	8
MAY 21...	1000	.77	157	7.0	9.5	9.0	1.5	230	540
JUL 07...	0945	.87	164	7.5	12.5	9.9	.4	80	49
AUG 06...	0930	.77	165	7.0	12.5	9.5	.6	90	23
SEP 17...	0930	.68	--	7.2	11.0	10.1	<.1	<20	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 07...	60	16	4.9	6.0	.3	46	19	7.8	.1
MAR 26...	66	17	5.7	7.0	.5	48	18	7.9	.1
MAY 21...	61	15	5.6	6.5	.5	44	19	7.0	.1
JUL 07...	63	16	5.5	5.7	.4	51	20	7[illegible]	.1
AUG 06...	68	18	5.7	5.7	.4	48	19	7.9	.1
SEP 17...	70	18	6.0	6.5	.6	47	18	7.6	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	15	100	--	.070	.11	.18	--	<.01	7.3
MAR 26...	17	123	.48	.140	1.8	1.9	2.4	<.01	1.5
MAY 21...	15	93	.10	.040	.03	.07	.17	.08	1.7
JUL 07...	14	108	.09	.120	.54	.66	.75	.03	2.0
AUG 06...	14	114	<.05	.240	.05	.29	--	<.03	.8
SEP 17...	16	118	<.05	.100	.23	.33	--	.06	.7

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)
SEP 17...	0930	2700	.2	20	0	<10	20	<10	10	3100

01399600 SOUTH BRANCH ROCKAWAY CREEK TRIBUTARY AT LEBANON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 17...	<10	35	.00	<10	0	20	240	.0	.0	0

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'24", long 74°46'01", Hunterdon County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on U.S. Route 22, 0.6 mi (1.0 km) north of Whitehouse Station, 0.9 mi (1.5 km) west of Whitehouse, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--13.2 mi² (34.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1964-67. March 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.52 ft (34.60 m) revised, National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Releases from Round Valley Reservoir enter stream 3,000 ft (910 m) upstream of gage (see Raritan River basin, reservoirs in).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1480 ft³/s (41.9 m³/s) Jan. 24, 1979, gage height, 12.82 ft (3.908 m); minimum, 2.8 ft³/s (0.11 m³/s) Sept. 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 944 ft³/s (26.7 m³/s) Mar. 21, gage height, 10.60 ft (3.231 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Mar. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	51	61	16	44	8.4	101	27	15	57	96	151
2	55	33	60	37	45	7.9	45	23	11	56	96	152
3	49	151	58	50	44	8.4	36	21	13	57	96	147
4	33	36	58	33	45	7.9	84	19	13	56	95	164
5	35	47	58	14	44	8.9	40	17	9.7	56	96	159
6	32	61	42	13	44	8.6	31	17	9.2	59	49	161
7	24	58	32	12	45	8.3	28	17	9.4	55	63	161
8	21	56	19	34	32	22	26	26	16	55	121	159
9	25	40	16	48	9.1	25	155	17	12	55	132	156
10	82	25	39	48	9.1	14	86	15	18	54	130	156
11	46	29	54	84	9.0	25	42	15	12	54	133	156
12	36	56	53	82	9.0	13	34	24	9.5	57	138	155
13	34	28	45	26	8.7	8.5	30	42	8.8	61	136	155
14	26	24	47	24	8.5	13	39	21	8.5	80	136	155
15	36	21	52	25	8.6	13	48	16	8.0	67	136	108
16	59	39	52	41	14	18	29	14	30	61	136	150
17	39	54	57	54	11	36	25	13	48	63	136	118
18	39	52	51	45	9.6	85	24	15	48	61	136	78
19	54	52	52	44	9.7	30	22	15	47	60	135	30
20	54	51	38	23	9.6	25	21	15	48	60	136	120
21	52	37	16	40	10	336	21	33	48	68	135	152
22	52	15	17	39	14	94	19	19	47	77	135	159
23	37	15	22	19	30	46	18	14	57	80	135	159
24	41	14	32	16	18	38	18	13	66	69	134	159
25	51	14	67	15	13	87	17	13	66	55	140	159
26	51	102	31	14	12	37	17	11	66	54	146	160
27	51	45	24	13	9.8	30	19	10	68	54	146	159
28	56	29	21	34	9.5	26	106	10	73	59	163	157
29	54	[illegible]	20	47	16	60	71	10	79	64	175	157
30	51	59	19	28	---	46	35	9.8	80	29	157	157
31	50	---	17	27	---	133	---	11	---	50	155	---
TOTAL	1493	1337	1230	1045	591.2	1318.9	1287	542.8	1044.1	1843	3953	4369
MEAN	48.2	44.6	39.7	33.7	20.4	42.5	42.9	17.5	34.8	59.5	128	146
MAX	168	151	67	84	45	336	155	42	80	80	175	164
MIN	21	14	16	12	8.5	7.9	17	9.8	8.0	29	49	30

CAL YR 1979 TOTAL 13318.4 MEAN 36.5 MAX 506 MIN 7.1
WTR YR 1980 TOTAL 20054.0 MEAN 54.8 MAX 336 MIN 7.9

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'49", long 74°44'11", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.4 mi (2.3 km) northeast of Whitehouse, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--37.1 mi^2 (96.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-62, 1964-65, 1973. April 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 99.64 ft (30.370 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Releases are made from Round Valley Reservoir to South Branch Rockaway Creek, 2.6 mi (4.2 km) upstream of gage (see Raritan River basin, reservoirs in).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,510 ft^3/s (99.4 m^3/s) Jan. 24, 1979, gage height, 9.55 ft (2.911 m); minimum, 6.3 ft^3/s (0.18 m^3/s) Aug. 7, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1730	1550	43.9	5.97	1.820	Apr. 9	1400	1470	41.6	5.79	1.765
Mar. 21	1900	*2370	67.1	7.42	2.262						

Minimum discharge, 6.3 ft^3/s (0.18 m^3/s) Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	442	77	101	47	62	31	314	97	48	37	99	160
2	141	65	98	67	66	38	156	83	39	61	99	158
3	130	442	94	82	67	38	124	76	51	61	102	152
4	89	104	94	63	66	38	278	68	48	61	96	171
5	99	94	93	41	65	37	143	64	32	61	94	164
6	96	105	80	49	65	29	109	60	29	73	59	166
7	65	101	105	57	65	23	97	59	31	60	62	164
8	59	96	58	60	60	49	92	97	52	60	123	161
9	66	79	51	76	51	72	463	62	39	60	138	158
10	224	73	72	73	42	39	284	54	73	59	137	158
11	128	83	88	206	41	70	150	53	41	59	141	158
12	99	164	87	248	30	36	126	91	32	63	147	158
13	96	76	116	70	50	43	112	169	29	64	146	158
14	70	66	103	67	39	113	146	77	27	81	145	158
15	75	60	95	70	25	55	174	59	25	71	146	112
16	96	75	93	79	37	55	104	52	40	65	147	155
17	75	89	109	90	58	105	88	48	56	69	145	123
18	70	87	86	87	52	296	82	53	56	66	145	83
19	85	85	86	125	46	83	77	55	55	64	146	35
20	84	84	73	65	48	67	74	56	56	64	145	125
21	82	69	58	75	33	913	70	101	56	69	145	157
22	82	45	48	76	40	316	64	64	54	77	145	162
23	70	45	61	54	85	164	61	48	61	85	145	164
24	79	44	90	55	57	133	58	43	69	73	145	164
25	88	42	196	63	42	295	57	40	68	60	150	164
26	85	316	85	54	35	129	55	36	68	59	157	166
27	83	135	66	63	35	105	63	34	75	59	158	166
28	97	81	59	60	43	92	355	33	82	64	174	164
29	93	88	56	74	47	197	267	32	82	69	193	164
30	80	101	54	57	---	158	128	31	83	33	168	164
31	78	---	50	73	---	385	---	34	---	54	166	---
TOTAL	3206	3071	2605	2426	1452	4204	4371	1929	1557	1961	4208	4512
MEAN	103	102	84.0	78.3	50.1	136	146	62.2	51.9	63.3	136	150
MAX	442	442	196	248	85	913	463	169	83	85	193	171
MIN	59	42	48	41	25	23	55	31	25	33	59	35

CAL YR 1979 TOTAL 37505 MEAN 103 MAX 1440 MIN 19
WTR YR 1980 TOTAL 35502 MEAN 97.0 MAX 913 MIN 23

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1977 to September 1978 (discontinued).
WATER TEMPERATURES: April 1977 to September 1978 (discontinued).
SEDIMENT ANALYSES: October 1976 to September 1978 (discontinued).

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 27...	1115	24	195	7.7	.0	15.1	<1.0	170	920	72
APR 14...	0930	147	145	7.1	10.0	10.2	1.0	490	540	49
MAY 21...	1130	171	160	7.6	15.0	8.6	4.9	--	>2400	61
JUL 07...	1130	60	168	8.1	21.0	9.3	1.2	490	350	62
AUG 06...	1045	107	152	7.6	23.5	8.7	1.4	330	1600	60
SEP 17...	1030	162	--	8.8	16.5	9.3	<.1	80	240	58

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 27...	17	7.1	7.7	1.4	51	--	20	12	.1
APR 14...	12	4.6	5.6	1.2	33	--	19	6.9	.1
MAY 21...	14	6.2	9.6	1.1	44	.2	17	7.8	.1
JUL 07...	15	5.9	5.8	1.4	49	--	19	7.8	.1
AUG 06...	14	6.0	6.2	1.4	42	--	17	7.8	.2
SEP 17...	14	5.6	--	1.3	43	.0	18	7.6	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 27...	13	120	1.9	--	--	--	--	.05	1.9
APR 14...	13	86	1.2	.220	.27	.49	1.7	.45	2.1
MAY 21...	12	111	.68	.070	1.0	1.1	1.8	.37	5.0
JUL 07...	4.5	94	.32	.160	.19	.35	.67	.04	5.2
AUG 06...	2.5	102	.32	.190	.47	.66	.98	<.03	2.6
SEP 17...	1.4	100	<.05	.080	.37	.45	--	.09	5.0

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
21...	1130	30	1	0	10	0	10	7
SEP								
17...	1030	30	0	0	40	0	20	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
21...	2800	10	280	.1	5	0	20	2
SEP								
17...	110	5	10	.3	3	0	10	2

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'04", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 1,400 ft (427 m) upstream from mouth, and 2.4 mi (3.9 km) southwest of Greater Cross Roads.

DRAINAGE AREA.--100 mi² (259 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 02...	0915	435	124	7.0	15.0	8.9	--	9200	>2400	41
MAR 05...	1200	74	212	6.9	.5	13.1	<.1	20	17	71
APR 14...	1045	445	151	7.0	11.0	9.8	.9	490	240	49
MAY 21...	1300	375	171	7.6	15.0	8.5	3.7	9200	350	57
JUL 07...	1245	118	166	8.5	21.0	10.1	1.1	790	130	58
AUG 06...	1145	175	167	8.3	24.5	9.3	1.7	1300	920	63
SEP 17...	1130	190	--	8.8	17.0	9.7	<.1	210	23	61

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 02...	10	3.9	5.5	2.0	23	--	13	8.3	.1
MAR 05...	17	7.0	12	1.3	56	--	21	16	.1
APR 14...	12	4.5	8.4	1.2	37	--	17	10	.1
MAY 21...	13	6.0	10	1.1	44	.0	16	11	.1
JUL 07...	14	5.6	7.9	1.5	47	--	18	11	.1
AUG 06...	15	6.3	8.6	1.5	47	--	17	11	.2
SEP 17...	15	5.8	5.6	1.3	41	--	18	8.2	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	11	95	<1.0	.200	.80	1.1	--	.30	5.2
MAR 05...	11	132	1.9	.110	--	--	--	--	1.1
APR 14...	9.0	96	.87	.070	.33	.40	1.3	.60	4.4
MAY 21...	11	117	.77	.110	.33	.44	1.2	.24	4.0
JUL 07...	7.6	100	.43	.110	.61	.72	1.2	.10	7.7
AUG 06...	5.5	118	.50	.600	.15	.75	1.2	.25	2.6
SEP 17...	1.6	103	.14	.140	.19	.33	.47	.06	3.8

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
MAY 21...	1300	--	--	--	20	1	--	0	10	0	--
SEP 17...	1130	1600	.0	3.7	--	--	0	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
MAY 21...	10	--	--	4	--	2000	--	9	--	180	--
SEP 17...	--	30	<10	--	<10	--	5200	--	30	--	430

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	.1	--	3	--	0	--	10	--	2	--	--
SEP 17...	--	.00	--	<10	--	0	--	30	--	6	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01399830 NORTH BRANCH RARITAN RIVER AT NORTH BRANCH, NJ

LOCATION.--Lat 40°36'00", long 74°40'27", Somerset County, Hydrologic Unit 02030105, on right bank 5 ft (1.5 m) upstream from bridge on State Highway 28 in North Branch, 0.1 mi (0.16 km) south of River Brook, and 3.6 mi (5.8 km) upstream from confluence with South Branch Raritan River.

DRAINAGE AREA.--174 mi^2 (451 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 56.94 ft (17.356 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those below 200 ft^3/s (5.66 m^3/s), which are poor. Some regulation by Round Valley Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft^3/s (399 m^3/s) Jan. 25, 1979, gage height, 16.62 ft (5.065 m); minimum, 20 ft^3/s (0.57 m^3/s) Sept. 19, 1980, gage height, 3.14 ft (0.957 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached an elevation of 75.6 ft (23.04 m), from high-water mark.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft^3/s (142 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2115	*9360	265	13.80	4.206

Minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 19, gage height, 3.14 ft (0.957 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	205	338	205	160	90	1920	647	231	158	141	160
2	1040	198	309	227	165	110	1110	512	172	158	158	156
3	579	1430	278	217	200	115	778	435	217	158	191	151
4	486	620	268	185	190	120	1570	382	247	155	155	173
5	488	376	259	172	162	130	964	339	170	150	146	163
6	511	364	252	172	152	131	668	309	166	264	179	170
7	329	340	544	189	167	135	585	279	168	164	101	164
8	289	305	274	179	148	179	533	282	193	159	159	155
9	277	273	223	192	132	334	2110	301	168	153	174	147
10	963	301	233	631	130	170	1820	260	295	144	166	144
11	701	335	251	1600	129	317	994	247	177	137	166	144
12	487	819	242	442	130	174	756	367	166	135	183	140
13	500	381	428	383	125	201	654	943	164	123	173	141
14	359	319	437	406	120	372	732	484	162	124	166	146
15	316	277	297	349	127	200	863	363	159	138	167	135
16	325	272	279	325	140	199	584	299	158	108	166	143
17	293	275	381	333	128	416	494	261	160	121	158	135
18	261	265	260	642	120	2030	455	259	160	119	158	178
19	270	252	237	326	125	724	419	260	158	104	161	62
20	262	245	241	282	131	478	394	254	160	100	160	166
21	254	232	249	261	140	3800	367	353	157	92	159	164
22	246	186	199	226	170	2620	325	291	148	98	158	162
23	227	188	233	200	318	1430	291	216	145	133	157	170
24	228	179	366	205	269	982	272	195	148	137	155	167
25	235	184	941	212	182	1720	254	180	144	91	156	160
26	221	1140	470	195	167	882	244	170	142	72	160	165
27	205	937	339	183	150	631	259	167	145	67	158	160
28	242	435	296	200	130	540	865	166	157	61	173	158
29	287	393	271	190	100	991	1880	166	158	140	206	158
30	221	371	249	205	---	1020	1230	166	305	148	174	158
31	206	---	224	175	---	1720	---	166	---	79	171	---
TOTAL	12528	12097	9868	9709	4507	22961	24390	9719	5300	3990	5055	4595
MEAN	404	403	318	313	155	741	813	314	177	129	163	153
MAX	1220	1430	941	1600	318	3800	2110	943	305	264	206	178
MIN	205	179	199	172	100	90	244	166	142	61	101	62

CAL YR 1979 TOTAL 176011 MEAN 482 MAX 6760 MIN 82
WTR YR 1980 TOTAL 124719 MEAN 341 MAX 3800 MIN 61

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'12", long 74°40'45", Somerset County, Hydrologic Unit 02030105, on right bank, 400 ft (120 m) upstream from U.S. Highway 202, 1.4 mi (2.3 km) upstream from confluence with South Branch, and 2.7 mi (4.3 km) west of Raritan.

DRAINAGE AREA.--190 mi² (492 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1923 to current year. Monthly discharge only for June 1923, published in WSP 1302. Prior to October 1945, published as "at Milltown".

REVISED RECORDS.--WSP 1552: 1924-26, 1928-29. WDR NJ-73-1: 1971-72(P).

GAGE.--Water-stage recorder. Concrete control since Sept. 1, 1936. Datum of gage is 50.43 ft (15.371 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 17, 1929, nonrecording gage at site 30 ft (9.1 m) downstream at same datum.

REMARKS.--Water-discharge records good. Some regulation by Round Valley Reservoir.

AVERAGE DISCHARGE.--57 years, 325 ft³/s (9.203 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft³/s (810 m³/s) Aug. 28, 1971, gage height, 15.47 ft (4.715 m), from high-water mark in gage house, from rating curve extended above 15,000 ft³/s (425 m³/s); minimum observed, about 3 ft³/s (0.08 m³/s) Nov. 28, 1930, gage height, 1.72 ft (0.524 m) result of freezeup; minimum daily, 7.5 ft³/s (0.21 m³/s) Sept. 26, 27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 21	2230	*11,600	328	11.68	3.560

Minimum discharge, 28 ft³/s (0.79 m³/s) Mar. 1, gage height, 2.40 ft (0.732 m) but may have been lower during the period of no gage-height record, Sept. 19-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	235	385	253	172	138	1810	637	273	137	158	187
2	867	227	347	267	227	128	1130	532	232	151	156	185
3	580	1280	315	273	242	124	820	470	295	193	218	174
4	921	568	336	251	256	138	1440	415	303	183	184	220
5	526	389	299	278	208	142	934	376	267	135	165	191
6	333	380	288	234	190	152	716	347	188	278	205	197
7	303	344	513	235	184	128	632	333	189	189	112	182
8	329	331	315	283	187	186	576	548	222	157	180	187
9	317	303	271	308	153	617	2140	380	181	147	213	182
10	488	327	275	244	148	228	1720	332	215	138	200	181
11	1430	353	282	474	142	287	973	313	273	128	200	181
12	536	826	281	1030	148	232	803	616	180	130	220	190
13	519	509	939	684	134	184	638	683	162	173	212	183
14	386	352	408	617	180	238	772	532	147	128	202	182
15	348	316	337	442	164	393	623	476	135	146	234	169
16	278	338	331	287	171	276	634	328	128	138	197	169
17	325	327	409	365	150	531	584	323	152	124	185	161
18	298	316	316	337	130	1980	534	313	148	120	190	132
19	333	281	292	681	168	678	458	323	145	116	188	93
20	297	276	283	387	167	525	443	316	148	116	192	235
21	281	282	259	330	178	4170	416	303	143	123	188	250
22	272	320	256	321	214	3270	280	258	137	113	186	195
23	262	289	275	302	365	1110	221	282	133	142	184	217
24	281	278	284	276	227	876	226	258	144	144	182	200
25	281	270	360	258	239	1540	277	241	142	124	183	198
26	290	1190	335	273	238	829	209	213	135	93	187	252
27	282	826	385	283	186	665	224	187	126	96	184	195
28	271	481	288	225	182	582	1070	188	115	99	192	187
29	274	412	252	219	150	414	1230	193	152	172	224	187
30	258	285	250	259	---	393	821	172	205	187	187	197
31	239	---	278	183	---	1750	---	175	---	97	187	---
TOTAL	13152	12533	11051	11028	5452	23829	24812	11538	5527	4184	5867	5559
MEAN	424	418	356	356	188	769	827	380	184	135	189	185
MAX	1280	1280	939	1030	365	4170	2140	683	305	278	234	252
MIN	239	235	250	183	124	124	209	172	115	87	112	93

CAL YR 1979 TOTAL 183120 MEAN 502 MAX 3110 MIN 81
WTR YR 1980 TOTAL 134543 MEAN 367 MAX 4170 MIN 93

01400120 RARITAN RIVER AT RARITAN, NJ

LOCATION.--Lat 40°33'52", long 74°38'10", Somerset County, Hydrologic Unit 02030105, at bridge on South Branch-Raritan Road in Raritan, 1.7 mi (2.7 km) upstream from Peters Brook, 3.5 mi (5.6 km) northeast of South Branch, and 3.6 mi (5.8 km) southeast of North Branch.

DRAINAGE AREA.--474 mi² (1,228 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1150	763	182	6.8	13.5	10.0	1.1	170	230	67
JAN 16...	0945	836	188	6.9	3.5	12.6	1.0	790	130	65
APR 10...	1000	--	120	7.4	11.0	11.0	2.0	1600	>2400	38
JUN 04...	0930	694	220	7.9	20.0	8.2	1.5	2400	330	72
JUL 24...	1000	267	209	--	25.0	7.7	1.6	800	<200	76
AUG 19...	0845	206	162	--	22.0	8.4	1.4	<200	200	73
SEP 30...	1300	273	201	8.3	16.5	10.2	1.1	20	22	78

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 09...	17	6.0	7.8	1.3	55	0	45	--	18	13
JAN 16...	16	6.2	11	1.5	52	0	43	--	23	14
APR 10...	9.6	3.5	5.7	1.5	32	0	26	--	15	7.8
JUN 04...	18	6.6	10	1.5	63	1	52	.2	21	13
JUL 24...	19	6.9	9.2	1.6	--	--	--	--	25	12
AUG 19...	18	6.9	8.6	1.6	46	0	--	--	22	10
SEP 30...	20	6.9	8.6	1.5	67	0	55	.0	23	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH-OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	.1	14	113	2.0	.300	4.1	4.4	6.4	.10	2.3
JAN 16...	.1	12	109	1.9	--	--	4.3	6.2	.62	2.5
APR 10...	.1	8.1	82	1.2	.230	--	--	--	1.1	8.1
JUN 04...	.1	10	123	1.4	.120	.38	.51	1.9	.27	4.4
JUL 24...	.1	6.8	128	.98	.140	.30	.44	1.4	.31	3.0
AUG 19...	.1	6.7	111	.26	.050	.43	.50	.76	.23	1.5
SEP 30...	.1	2.5	118	.25	.260	.29	.55	.80	.18	2.0

01400120 RARITAN RIVER AT RARITAN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 04...	0930	10	1	0	40	0	20	3
SEP 30...	1300	20	1	0	30	0	10	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 04...	910	4	80	.2	2	0	20	1
SEP 30...	140	0	30	.3	1	0	10	10

01400300 PETERS BROOK NEAR RARITAN, NJ

LOCATION.--Lat 40°35'35", long 74°40'00", Somerset County, Hydrologic Unit 02030105, on left bank 12 ft (3.7 m) upstream from bridge on Garretson Road, 1.5 mi (2.4 km) north of Raritan, and 2.5 mi (4.0 km) from mouth.

DRAINAGE AREA.--4.19 mi² (10.85 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to current year.

REVISED RECORD.--WDR NJ-79-1: 1978(P).

GAGE.--Water-stage recorder. Datum of gage is 68.713 ft (20.944 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records good except those below 1.0 ft³/s (0.03 m³/s), which are fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 814 ft³/s (23.1 m³/s) Mar. 21, 1980, gage height, 6.92 ft (2.109 m); no flow part or all of some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 21	1850	*814	23.1	6.92	2.109
Apr. 9	1245	639	18.1	6.11	1.862

No flow many days during August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	.77	1.1	1.1	.68	.55	30	4.9	1.7	.42	.09	.00
2	6.0	.80	1.0	1.1	.68	.58	6.8	3.6	1.1	.36	.05	.00
3	6.5	32	.93	.98	.65	.55	4.7	3.1	3.7	.45	.03	.00
4	2.8	3.4	.94	.91	.69	.61	34	2.8	1.2	.31	.02	.00
5	3.5	1.8	.93	.95	.68	1.0	6.6	2.4	.72	2.0	.02	.00
6	2.0	1.4	5.3	.85	.67	.78	4.0	2.2	.50	3.0	.02	.00
7	1.6	1.2	11	.89	.72	.70	3.3	2.6	.56	.46	.67	.00
8	1.2	1.0	1.9	.91	.71	3.4	3.0	11	1.4	.35	.07	.00
9	3.2	.97	1.3	.78	.73	3.7	122	3.1	1.5	.26	.05	.00
10	44	4.5	1.2	.66	.73	3.7	26	2.4	1.8	.25	.01	.00
11	5.9	11	1.1	43	.67	18	6.7	2.4	.81	.22	.01	.00
12	5.6	26	1.1	22	.71	1.8	4.7	7.2	.60	.27	.02	.00
13	4.1	3.1	17	2.3	.66	1.0	3.9	12	.47	.18	.01	.00
14	2.2	2.7	3.9	2.1	.68	2.5	8.9	6.0	.43	.15	.01	.00
15	1.7	1.8	1.9	2.2	.74	4.3	8.2	3.0	.46	.13	.03	.00
16	1.4	1.5	1.9	1.6	4.5	6.6	4.0	2.2	.37	.18	.01	.00
17	1.2	1.3	4.3	1.4	1.5	48	3.3	1.9	.28	.37	.00	2.4
18	1.1	1.1	1.4	8.5	.65	42	3.1	2.7	.27	.14	.00	20
19	1.2	1.0	1.1	17	.59	4.1	2.8	2.7	.27	.09	.03	.21
20	1.1	1.0	1.1	2.6	.61	3.2	2.6	2.6	.25	.07	.04	.05
21	1.1	.98	1.1	1.8	.74	164	2.6	8.5	.19	.05	.00	.03
22	1.1	.96	1.5	1.7	9.6	31	1.9	3.0	.21	.38	.00	.01
23	1.0	.98	2.7	2.0	4.5	9.8	2.4	2.0	.19	.32	.00	.01
24	1.0	.96	6.6	1.4	2.0	9.0	2.3	1.8	.21	.08	.00	.00
25	1.1	.90	51	1.2	1.9	52	2.4	1.7	.20	.03	.00	.01
26	.90	43	3.7	1.1	1.1	7.1	2.0	1.5	.18	.03	.00	.19
27	.90	4.9	2.2	.98	.95	4.9	2.8	1.3	.59	.03	.00	.00
28	2.3	2.2	1.7	.99	.89	4.1	66	1.2	.28	.02	.00	.00
29	1.5	1.6	1.6	.90	.70	29	28	1.0	1.3	4.6	.00	.01
30	.90	1.3	1.4	.80	---	12	7.6	.82	14	.04	.00	.01
31	.81	---	1.2	.78	---	96	---	1.2	---	.09	.00	---
TOTAL	153.77	155.60	116.20	125.48	40.23	585.97	406.6	104.97	35.72	15.95	1.19	22.93
MEAN	4.96	5.19	3.75	4.05	1.39	18.9	13.6	3.39	1.19	.51	.038	.76
MAX	88	43	51	43	9.6	164	122	12	14	4.6	.67	20
MIN	.81	.77	.93	.66	.59	.55	1.9	.82	.18	.02	.00	.00
CFSM	1.18	1.24	.90	.97	.33	4.51	3.23	.81	.28	.12	.009	.18
IN.	1.36	1.38	1.03	1.11	.36	5.20	3.61	.93	.32	.14	.01	.20

CAL YR 1979 TOTAL 3201.33 MEAN 8.77 MAX 400 MIN .15 CFSM 2.09 IN 28.22
WTR YR 1980 TOTAL 1764.62 MEAN 4.82 MAX 164 MIN .00 CFSM 1.15 IN 15.66

01400500 RARITAN RIVER AT MANVILLE, NJ

LOCATION.--Lat 40°33'18", long 74°35'02", Somerset County, Hydrologic Unit 02030105, on left bank at downstream side of highway bridge at Manville, and 1.4 mi (2.2 km) upstream from Millstone River.

DRAINAGE AREA.--490 mi² (1,269 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only, published in WSP 521), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1552: 1904, 1906, 1922, 1923(M), 1924-25, 1926-29(M), 1930, 1932-33(M), 1924-54. WDR-NJ-75-1: 1964(M), 1969(M), 1970(P), 1972(P), 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 20.61 ft (6.282 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 15, 1923, nonrecording gage on downstream side of highway bridge at same site and datum. From Oct. 1, 1952 to Sept. 30, 1966, water-stage recorder at station at Bound Brook, above Calco Dam (station 01403000) used as auxiliary gage when stage is above 5.0 ft (1.52 m). Since Oct. 1, 1966, water-stage recorder at station at Bound Brook, used as auxiliary gage, was moved downstream to present site (station 01403060). Between June 9, 1978 and June 7, 1979 gage temporarily relocated at site 1.4 mi (2.2 km) downstream, just upstream of Millstone River, because of reconstruction of highway bridge.

REMARKS.--Records fair except those over 3,000 ft³/s (85.0 m³/s), which are poor. Records given herein represent flow at gage only. Slight diurnal fluctuation at low flow. Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversion to Round Valley Reservoir (see Raritan River Basin, diversions). Water diverted 1,500 ft (457 m) upstream from station and returned to river 0.6 mi (1.0 km) downstream from station by Johns-Manville Corporation (see Raritan River Basin, diversions).

AVERAGE DISCHARGE.--62 years, (water years 1904-06, 1922-80), 763 ft³/s (21.61 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,300 ft³/s (1,030 m³/s) Aug. 28, 1971, gage height, 23.8 ft (7.25 m), from floodmark (backwater from Millstone River), from rating curve Extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurements at gage heights, 14.9 and 20.42 ft (4.54 and 6.224 m); minimum daily discharge, 17 ft³/s (0.48 m³/s) Sept. 19, 1964 (does not include water diverted to Johns-Manville Plant).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s (283 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Mar. 22	0345	*17700	501	16.63	5.069

Minimum daily discharge, 182 ft³/s (5.15 m³/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2890	544	948	663	507	417	5820	1570	527	371	272	319
2	4420	547	876	635	566	479	3350	1270	542	323	309	314
3	1990	2540	816	573	566	489	2170	1100	542	311	391	295
4	1770	2060	769	516	574	466	3110	979	746	320	311	318
5	1380	1240	749	484	532	363	2640	876	516	346	269	314
6	2390	1060	738	441	485	310	1770	795	396	636	331	326
7	1410	973	1270	428	440	293	1500	769	378	462	264	323
8	1140	902	901	522	468	345	1330	1210	460	309	279	311
9	996	811	745	513	413	801	3830	964	481	318	291	299
10	2920	889	701	463	360	483	6120	779	[illegible]	320	313	313
11	2770	990	710	668	371	896	2780	723	518	289	302	328
12	1810	2180	680	3570	330	585	1930	880	403	321	318	327
13	1760	1420	900	1360	329	467	1650	2320	350	277	307	322
14	1320	1150	1310	1070	323	477	1610	1530	339	281	292	319
15	1100	991	898	1060	330	630	2120	1070	344	302	293	316
16	1020	888	813	940	373	659	1590	882	334	327	312	310
17	922	840	973	851	408	1060	1260	897	305	358	295	309
18	833	780	765	828	346	5010	1090	889	290	355	284	403
19	803	721	640	1670	338	2370	1020	779	309	323	282	182
20	753	689	670	1110	338	1520	952	727	320	292	280	259
21	716	664	605	913	331	4890	903	967	365	278	284	300
22	680	507	666	849	635	13100	825	1010	326	316	282	293
23	693	569	679	809	770	3740	748	760	307	626	283	276
24	682	569	835	682	771	2280	701	643	302	298	280	272
25	697	556	2090	650	529	4390	662	579	311	262	274	278
26	621	1760	1590	604	454	2580	644	521	311	245	287	307
27	595	2980	1110	541	356	1850	615	661	379	275	253	278
28	624	1650	948	568	341	1580	2850	587	350	288	296	266
29	761	1200	861	546	336	1980	3680	548	354	335	352	253
30	628	1060	790	471	---	2930	2170	218	783	302	326	261
31	526	---	717	583	---	6170	---	267	---	258	328	---
TOTAL	47241	33520	27883	25516	12712	61580	61002	27313	12960	10178	9206	9181
MEAN	1524	1117	899	823	438	1986	2033	881	432	328	297	306
MAX	4420	2980	2090	3570	771	13100	6120	2320	783	636	391	403
MIN	526	544	605	428	323	293	644	218	290	245	264	182

CAL YR 1979 TOTAL 502728 MEAN 1377 MAX 29300 MIN 226
WTR YR 1980 TOTAL 338153 MEAN 924 MAX 13100 MIN 182

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1959, 1962-73, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1420	923	188	7.0	14.0	10.2	1.0	330	200	69
FEB 20...	1300	301	260	8.0	.5	14.6	1.2	23	4	90
APR 14...	0945	1485	167	7.8	12.5	11.0	.6	110	79	57
JUN 03...	1100	508	213	7.9	22.0	8.1	1.5	790	230	65
JUL 15...	0930	307	222	--	25.0	8.1	2.0	80	5	83
AUG 19...	1030	283	192	--	23.0	8.4	1.2	50	20	51
SEP 30...	1100	260	205	--	16.0	10.2	1.4	80	49	78

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 09...	17	6.5	9.2	1.7	61	0	50	--	22	12
FEB 20...	22	8.4	15	1.3	67	0	55	--	28	23
APR 14...	14	5.4	7.9	1.3	45	0	37	--	20	10
JUN 03...	15	6.6	10	1.3	67	0	55	.2	21	13
JUL 15...	21	7.3	9.8	1.5	--	--	--	--	24	14
AUG 19...	14	3.9	6.9	1.2	--	--	--	--	18	8.5
SEP 30...	20	6.9	8.8	1.5	--	--	--	--	23	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	.1	13	112	2.0	.210	.27	.48	2.5	.21	2.2
FEB 20...	.2	11	135	1.9	.100	1.3	1.4	3.3	.19	.8
APR 14...	.1	10	100	1.5	.090	.57	.66	2.2	.79	1.9
JUN 03...	.1	8.1	146	1.2	.290	.29	.58	1.8	.21	1.2
JUL 15...	.1	4.5	141	.35	.120	.41	.53	.88	.46	4.5
AUG 19...	.1	1.7	82	.26	.030	.83	.86	1.1	.21	1.7
SEP 30...	.1	2.4	108	.29	.210	.41	.62	.91	.15	4.2

DATE	TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1100	--	--	--	[illegible]	[illegible]	--	[illegible]	[illegible]	[illegible]	--
SEP 30...	1100	[illegible]	[illegible]	[illegible]	--	--	[illegible]	--	--	--	[illegible]

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
JUN											
03...	<10	--	--	3	--	550	--	3	--	60	--
SEP											
30...	--	<10	<10	--	<10	--	3900	--	<10	--	740

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
03...	.2	--	0	--	0	--	20	--	4	--	--
SEP											
30...	--	.00	--	<10	--	0	--	74	--	4	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
SEP											
30...	.0	5	.7	.0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
SEP											
30...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01400560 MILLSTONE RIVER AT APPLEGARTH, NJ

LOCATION.--Lat 40°16'28", long 74°28'22", Middlesex County, Hydrologic Unit 02030105, at bridge on Prospect Plains-Applegarth Road in Applegarth, 2.7 mi (4.3 km) east of Hightstown, and 5.2 mi (8.4 km) upstream from Rocky Brook.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-62, 1964, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
02...	1230	--	78	6.0	17.5	7.3	--	1600	>2400	27
JAN										
17...	1150	11	124	5.3	3.5	--	--	<2	33	34
APR										
02...	0930	--	93	6.0	6.5	10.7	.5	5	17	24
JUN										
02...	1030	--	101	6.6	20.0	7.1	1.1	310	460	25
JUL										
17...	0830	8.5	138	6.2	22.0	5.6	3.8	1700	35000	30
AUG										
21...	1000	--	94	6.6	19.5	7.3	1.1	260	<200	25

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
02...	6.2	2.8	3.9	3.5	9	0	7	.0	17	8.2
JAN										
17...	7.7	3.6	5.1	2.2	4	0	3	--	25	10
APR										
02...	5.5	2.5	3.7	2.1	2	0	2	--	21	6.9
JUN										
02...	5.1	2.9	5.1	2.0	11	0	9	--	17	9.7
JUL										
17...	6.5	3.4	4.5	4.2	7	0	6	--	21	9.7
AUG										
21...	4.6	3.3	5.0	2.2	15	0	12	--	12	9.7

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
02...	.2	11	67	<1.0	.300	.27	.57	--	.27	13
JAN										
17...	.2	11	75	1.5	.160	.38	.54	1.9	.23	1.4
APR										
02...	.2	6.6	58	1.3	.090	.45	.54	1.8	.29	2.3
JUN										
02...	.2	8.6	84	1.2	.260	.17	.43	1.6	.53	4.5
JUL										
17...	.2	7.2	85	1.3	.340	.96	1.3	2.6	2.0	5.7
AUG										
21...	.2	9.5	67	.65	.070	.44	.51	1.2	.55	1.3

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT											
02...	1230	101.0	1.5	46	80	2	3	10	20	0	<10

01400560 MILLSTONE RIVER AT APPLEGARTH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
02...	10	40	20	3	90	3300	38000	13	40	70

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
02...	110	<.5	.00	6	20	0	0	30	80	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
02...	12	.0	3	9.4	7.7	.9	.0	.6	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
02...	1.1	.6	.0	.0	.0	.0	.0	.0	0	.0

01400650 MILLSTONE RIVER AT GROVERS MILL, NJ

LOCATION.--Lat 40°19'19", long 74°36'31", Mercer County, Hydrologic Unit 02030105, at bridge on Millstone Road in Grovers Mill, 0.3 mi (0.5 km) upstream from Cranbury Brook, and 2.7 mi (4.4 km) north of Dutch Neck.

DRAINAGE AREA.--43.4 mi² (112.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
03...	1030	129	6.4	18.5	5.0	1.4	3500	700	36	8.4
JAN										
17...	1315	188	6.5	5.0	--	1.5	2	<2	44	9.7
APR										
08...	0930	160	6.4	13.0	8.5	2.6	5	49	42	9.7
JUN										
02...	1330	184	7.0	22.0	5.9	5.2	170	130	38	8.2
JUL										
17...	1230	170	6.8	25.0	3.9	3.0	700	16000	41	9.3
AUG										
21...	1200	180	6.8	21.5	6.1	1.2	230	<20	44	10

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
03...	3.7	6.5	4.7	15	0	12	.0	16	12	.2
JAN										
17...	4.7	13	3.3	18	0	15	--	26	20	.2
APR										
08...	4.2	9.4	2.9	16	0	13	--	25	15	.3
JUN										
02...	4.3	12	2.8	24	0	20	.0	22	20	.3
JUL										
17...	4.2	12	3.8	29	0	24	--	19	16	.3
AUG										
21...	4.6	14	3.7	24	0	20	--	17	19	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	7.5	90	1.5	.300	1.2	1.5	3.0	.57	5.2
JAN									
17...	9.1	104	2.7	.990	.00	.99	3.7	.74	4.3
APR									
08...	6.3	176	2.2	.520	.48	1.0	3.2	.65	4.2
JUN									
02...	7.0	123	2.7	.210	1.6	1.8	4.5	1.2	7.7
JUL									
17...	6.1	112	2.4	.640	.66	1.3	3.7	1.4	--
AUG									
21...	5.9	112	3.1	.040	.59	.63	3.7	3.8	3.3

DATE	TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT											
03...	1030	10000	.3	20	50	2	5	10	20	0	010
JUN											
02...	1330	--	--	--	5	2	--	1	20	1	--

01400650 MILISTONE RIVER AT GROVERS MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 03...	20	30	<10	4	30	1300	19000	4	30	20
JUN 02...	10	--	--	3	--	2000	--	10	--	90

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 03...	180	<.5	.10	3	<10	0	0	30	120	5
JUN 02...	--	<.5	--	3	--	0	--	30	--	1

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	15	.0	7	29	14	2.4	.0	6.7	.3	.0
JUN 02...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	.0	.0	0	.0	.0	.0	.0	.0	0	.0
JUN 02...	--	--	--	--	--	--	--	--	--	--

01401000 STONY BROOK AT PRINCETON, NJ

LOCATION.--Lat 40°19'59", long 74°40'56", Mercer County, Hydrologic Unit 02030105, at bridge on U.S. Highway 206, 1.6 mi (2.6 km) southwest of Princeton, and 4.0 mi (6.4 km) upstream from Carnegie Lake.

DRAINAGE AREA.--44.5 mi² (115.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 62.23 ft (18.968 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records fair. Since July 1959 some regulation by several small reservoirs, combined capacity, 49,800,000 gal (188,500 m³).

AVERAGE DISCHARGE.--27 years, 64.8 ft³/s (1.835 m³/s), 19.78 in/yr (502 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft³/s (254 m³/s) Aug. 28, 1971, gage height, 14.26 ft (4.346 m), from rating curve extended above 4,000 ft³/s (110 m³/s) on basis of contracted-opening measurement of peak flow; no flow many days in August and September 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1845	1950	55.2	6.81	2.076	Mar. 25	0530	1870	53.0	6.65	2.027
Mar. 21	2000	*3980	113	9.95	3.033	Apr. 9	1630	2210	62.6	7.32	2.231

Minimum discharge, 0.23 ft³/s (0.007 m³/s) Sept. 13, 14, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	645	21	47	37	17	12	601	91	9.6	6.1	2.2	.57
2	314	21	43	36	19	12	259	61	9.1	4.1	2.2	.50
3	186	176	37	32	17	11	154	45	10	3.3	4.4	.43
4	138	126	35	26	15	12	350	36	19	2.7	2.1	.39
5	112	58	34	29	14	14	204	29	10	2.0	16	.36
6	144	45	35	24	14	15	115	25	7.3	3.2	30	1.1
7	79	41	95	27	14	14	86	22	7.0	1.9	8.6	.54
8	61	36	56	27	13	24	70	69	8.2	1.7	4.7	.37
9	59	34	37	23	13	162	705	45	8.1	1.4	3.5	.32
10	607	95	34	20	13	66	504	26	11	1.1	2.0	.30
11	295	110	33	68	12	271	171	22	9.3	1.1	1.5	.25
12	170	292	30	452	12	84	113	72	7.0	1.0	2.1	.26
13	161	126	65	111	11	52	87	339	5.8	.82	2.6	.25
14	103	104	127	80	11	94	83	114	5.0	.68	1.9	.47
15	77	77	59	80	12	121	136	58	4.7	.61	1.4	5.1
16	62	63	48	60	21	147	76	39	5.0	2.2	1.3	4.5
17	53	53	56	49	23	288	52	30	4.4	3.7	.86	1.9
18	48	47	37	54	16	618	45	32	3.9	1.8	.77	35
19	41	42	32	224	13	178	40	35	3.3	1.5	.76	11
20	39	39	40	101	12	123	35	27	3.0	1.4	.83	4.7
21	36	36	35	71	14	1540	33	64	2.7	.99	.77	2.7
22	34	34	37	59	28	571	28	57	2.6	1.3	.73	1.8
23	30	33	49	73	95	240	24	30	2.0	3.2	.71	1.4
24	33	31	95	49	53	156	23	22	2.1	1.5	.65	1.2
25	33	29	220	40	33	730	21	19	1.9	1.1	.52	2.5
26	26	257	130	33	27	193	20	16	1.5	.93	.48	6.1
27	23	199	80	31	19	126	25	13	1.5	.71	.52	6.7
28	25	99	61	30	18	96	255	11	1.6	.60	.53	3.0
29	34	72	53	25	13	306	197	9.8	1.3	16	.53	1.8
30	28	56	47	22	---	287	98	9.2	11	5.7	.52	1.4
31	23	---	42	20	---	602	---	9.0	---	3.3	.55	---
TOTAL	3719	2452	1829	2013	592	7165	4610	1477.0	178.9	77.64	96.23	96.91
MEAN	120	81.7	59.0	64.9	20.4	231	154	47.6	5.96	2.50	3.10	3.23
MAX	645	292	220	452	95	1540	705	339	19	16	30	35
MIN	23	21	30	20	11	11	20	9.0	1.3	.60	.48	.25
CFSM	2.70	1.84	1.33	1.46	.46	5.19	3.46	1.07	.13	.06	.07	.07
IN.	3.11	2.05	1.53	1.68	.49	5.99	3.85	1.23	.15	.06	.08	.08

CAL YR 1979 TOTAL 42106.90 MEAN 115 MAX 2300 MIN 6.1 CFSM 2.59 IN 35.20
WTR YR 1980 TOTAL 24306.68 MEAN 66.4 MAX 1540 MIN .23 CFSM 1.49 IN 20.31

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-75, 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1956 to September 1962, October 1963 to September 1964, October 1965 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: January 1956 to June 1970.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 16...	1000	62	176	7.4	9.0	11.6	--	80	50	57
JAN 16...	1450	58	181	6.5	5.5	--	1.7	170	90	58
APR 08...	1115	69	153	7.7	12.0	11.1	1.0	170	22	52
MAY 28...	1200	11	207	8.0	17.0	10.2	1.4	49	79	66
JUL 16...	1200	.57	312	8.0	26.0	4.5	2.0	350	240	96
AUG 14...	1200	2.0	252	7.9	23.0	7.5	1.1	33	17	77

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 16...	13	5.9	9.8	1.9	43	0	35	.0	26	11
JAN 16...	13	6.3	12	1.8	43	0	35	--	28	14
APR 08...	12	5.3	8.6	1.6	34	0	28	--	23	9.6
MAY 28...	15	6.9	14	1.7	59	0	48	--	27	13
JUL 16...	22	9.9	22	2.4	93	0	76	--	28	30
AUG 14...	18	7.8	17	3.0	76	0	62	--	24	21

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	.1	14	111	1.5	.400	.47	.87	2.4	.12	2.9
JAN 16...	.1	13	112	1.5	.080	3.8	3.9	5.4	.13	2.8
APR 08...	.1	11	94	1.5	.140	.66	.80	2.3	.61	2.2
MAY 28...	.1	4.7	120	.85	.120	.39	.51	1.4	.15	2.1
JUL 16...	.3	1.8	186	<.05	.100	.51	.61	--	.12	4.9
AUG 14...	.3	6.6	143	<.05	<.010	--	.89	--	.15	2.9

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 16...	1000	[illegible]	.2	3.9	20	1	0	0	50	0	[illegible]

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 16...	20	40	20	3	20	210	39000	0	20	10

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 16...	1000	.2	.00	0	30	0	0	20	120	2

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

LOCATION.--Lat 40°22'10", long 74°36'59", Middlesex County, Hydrologic Unit 02030105, at bridge on Mapleton Road in Kingston, 0.3 mi (0.4 km) east of Delaware and Raritan Canal at Kingston, 0.7 mi (1.1 km) downstream from Carters Brook, and 3.8 mi (6.1 km) northwest of Scotts Corners.

DRAINAGE AREA.--9.0 mi² (23.3 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1000	47	128	6.7	7.5	9.8	2.4	--	--	41
FEB 19...	1420	4.4	360	6.8	4.5	14.4	--	33	6	110
MAR 31...	1115	180	87	7.0	6.0	11.0	3.0	920	1600	25
MAY 27...	1245	3.0	284	7.0	15.0	10.1	1.5	1100	110	100
JUL 16...	0830	1.5	159	6.9	19.0	7.0	1.1	1300	920	48
AUG 14...	0900	1.5	210	6.7	17.0	7.9	.4	230	1600	70
SEP 25...	0900	1.5	186	6.6	15.0	8.2	1.6	330	790	61

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 11...	10	3.8	7.2	2.1	18	0	15	.0	30	7.6
FEB 19...	25	12	14	2.2	28	0	23	--	96	18
MAR 31...	5.0	3.0	3.9	1.6	12	0	10	--	18	5.0
MAY 27...	22	11	12	2.1	30	0	25	--	71	12
JUL 16...	11	5.1	8.3	2.1	27	0	22	--	15	11
AUG 14...	17	6.8	8.8	2.2	24	0	20	--	34	11
SEP 25...	15	5.7	9.2	2.2	22	0	18	--	26	12

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 .DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	.1	12	92	<1.0	1.200	.00	1.2	--	.07	9.0
FEB 19...	.1	13	211	3.2	4.110	2.0	6.1	9.3	.03	2.6
MAR 31...	.1	6.7	68	.40	.250	1.3	1.6	2.0	<.01	6.4
MAY 27...	.1	12	192	4.0	.090	.54	.63	4.6	.03	5.5
JUL 16...	.1	9.2	111	4.5	.090	.20	.29	4.8	.06	1.6
AUG 14...	.1	11	139	4.5	.030	.35	.38	4.9	.09	.4
SEP 25...	.1	12	112	5.1	.070	.22	.29	5.4	.09	1.7

01401400 HEATHCOTE BROOK AT KINGSTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
11...	1000	120	1	0	60	0	20	24

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
11...	860	2	80	.2	11	0	50	1

01401440 MILLSTONE RIVER AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'15", Middlesex County, Hydrologic Unit 02030105, at bridge on Lincoln Highway in Kingston, 0.2 mi (0.4 km) downstream from the outflow of Carnegie Lake, and 3.0 mi (4.9 km) northwest of Plainsboro.

DRAINAGE AREA.--172 mi² (445 km²), includes 8.0 mi² (20.7 km²) which drains into Delaware and Raritan Canal.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 15...	1230	E310	132	7.0	10.5	10.6	1.7	700	49	42
FEB 19...	1230	E106	200	7.3	5.0	11.2	--	<20	2	53
APR 08...	1400	E310	137	7.1	13.0	10.6	1.3	20	13	40
MAY 27...	1000	E117	159	7.3	20.5	9.2	5.2	20	20	48
JUL 16...	1000	E7.8	190	--	26.0	4.3	5.6	20	<20	56
AUG 14...	1015	E14	190	--	27.0	6.4	3.9	5400	1300	56
SEP 25...	1100	--	203	--	21.0	4.6	6.8	2400	3500	65

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 15...	10	4.1	6.9	3.0	22	0	18	.0	23	11
FEB 19...	12	5.7	13	2.9	27	0	22	--	25	20
APR 08...	9.4	3.9	7.3	2.3	21	0	17	--	20	11
MAY 27...	11	5.0	9.9	2.4	29	0	24	--	21	13
JUL 16...	13	5.8	13	3.0	--	--	--	--	20	19
AUG 14...	13	5.7	11	3.3	--	--	--	--	19	17
SEP 25...	16	6.0	12	3.8	--	--	--	.2	23	19

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 15...	.2	10	89	1.5	.460	1.0	1.5	3.0	.38	6.2
FEB 19...	.2	8.1	123	3.4	.500	1.5	2.0	5.4	.54	3.6
APR 08...	.1	7.5	102	1.7	.210	.57	.78	2.5	.50	3.7
MAY 27...	.2	7.0	108	1.5	.130	.68	.81	2.3	.13	5.9
JUL 16...	.3	4.0	120	.37	.140	1.5	1.6	2.0	.58	6.4
AUG 14...	.3	5.6	111	<.05	.160	1.0	1.2	--	.43	4.1
SEP 25...	.3	1.9	118	.25	.180	1.4	1.6	1.8	1.6	7.6

01401440 MILLSTONE RIVER AT KINGSTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 15...	1230	--	--	--	30	1	0	0	50	0	<10
SEP 25...	1100	1800	.8	11	20	3	0	0	70	1	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 15...	20	10	--	6	10	1300	6700	2	20	60	110
SEP 25...	30	<10	<10	8	<10	2400	6700	26	90	450	630

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BCTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC,. TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.2	.00	5	--	0	0	20	50	7	6	.0
SEP 25...	<.1	.01	4	<10	0	0	40	100	0	16	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.0	11	15	5.8	6.9	.0	.6	.0	.0	.0	.0
SEP 25...	.0	16	32	.0	16	.0	2.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
SEP 25...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ

LOCATION.--Lat 40°24'52", long 74°39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206 at State Route 533, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton.

DRAINAGE AREA.--27.6 mi^2 (71.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
16...	1300	58	182	7.3	12.0	11.9	--	350	8	61
JAN										
16...	1245	57	164	6.3	4.5	--	1.1	210	80	57
MAR										
31...	1345	76	85	7.0	6.0	11.6	1.5	--	--	28
MAY										
28...	0930	80	203	8.0	15.5	9.5	--	240	130	70
JUL										
10...	1000	18	295	--	24.0	6.8	2.2	800	790	97
AUG										
18...	1300	19	399	--	21.0	9.0	2.7	<200	230	140

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
16...	14	6.4	10	1.6	41	0	34	29	10	.1
JAN										
16...	13	6.0	9.6	1.4	34	0	28	26	11	.1
MAR										
31...	5.6	3.3	4.0	1.4	15	0	12	18	3.8	.1
MAY										
28...	16	7.2	12	1.7	62	0	51	28	10	.1
JUL										
10...	23	9.7	20	1.8	--	--	--	38	20	.1
AUG										
18...	34	13	22	4.4	--	--	--	74	28	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
16...	14	114	1.9	.400	1.0	1.4	3.3	.15	4.5
JAN									
16...	13	88	2.2	--	--	5.4	7.6	.20	1.8
MAR									
31...	8.6	70	1.2	.030	1.2	1.2	2.4	<.01	5.3
MAY									
28...	5.5	124	1.5	.140	.27	.41	1.9	.31	1.6
JUL									
10...	6.2	180	.46	.180	.74	.92	1.4	.56	4.3
AUG									
18...	8.5	271	.72	<.030	--	.64	1.4	1.1	2.5

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
OCT								
16...	1300	2400	.2	9.8	0	<10	30	20

DATE	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
OCT								
16...	20	24000	20	720	.00	30	0	100

01401650 PIKE RUN AT BELLE MEAD, NJ

LOCATION.--Lat 40°28'05", long 74°38'57", Somerset County, Hydrologic Unit 02030105, on right bank 20 ft (6.1 m) upstream of Township Line Road, 0.7 mi (1.1 km) east of Belle Mead, 0.8 mi (1.3 km) upstream of Cruser Brook, and 1.0 mi (1.6 km) downstream of bridge on U.S. Route 206.

DRAINAGE AREA.--5.36 mi^2 (13.88 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1980.

GAGE.--Water-stage recorder and parking bumper control. Datum of gage is 60.3 ft (18.38 m) National Gedetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1810, 12.1 ft (3.69 m) from floodmark, present datum, Aug. 28, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft^3/s (1.42 m^3/s) and maximum (*) for period July to September:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Sept. 18	0435	52	1.47	3.90	1.189

No flow Aug. 20 to Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										1.0	.08	.00
2										.28	.05	.00
3										.27	.25	.00
4										.27	.09	.00
5										.19	1.8	.00
6										1.6	2.4	.00
7										.22	.18	.00
8										.13	.07	.00
9										.11	.04	.00
10										.09	.04	.00
11										.07	.04	.00
12										.10	.02	.00
13										.06	.01	.00
14										.04	.01	.00
15										.04	.01	.00
16										.04	.01	.00
17										.06	.01	.00
18										.07	.01	10
19						†14.2				.04	.01	.53
20										.04	.00	.29
21										.03	.00	.07
22						†80.5				.02	.00	.05
23										1.4	.00	.03
24										.26	.00	.01
25										.05	.00	.45
26										.03	.00	4.9
27										.01	.00	2.2
28										.01	.00	.26
29										4.0	.00	.04
30										.57	.00	.03
31										.13	.00	---
TOTAL										11.23	5.13	18.86
MEAN										.36	.17	.63
MAX										4.0	2.4	10
MIN										.01	.00	.00
CFSM										.07	.03	.11
IN										.08	.04	.13

† Result of discharge measurement.

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, on left bank 30 ft (9 m) downstream from highway bridge at Blackwells Mills, and 0.3 mi (0.5 km) downstream from Six Mile Run.

DRAINAGE AREA.--258 mi² (668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to December 1904 (gage heights only), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at Millstone" 1903-04.

REVISED RECORDS.--WSP 1552: 1924-25(M), 1926.

GAGE.--Water-stage recorder. Concrete control since Nov. 18, 1933. Datum of gage is 26.97 ft (8.220 m) National Geodetic Vertical Datum of 1929. June 27, 1903 to Dec. 31, 1904, nonrecording gage at bridge 2.0 mi (3.2 km) downstream at Millstone at different datum. Aug. 4, 1921 to Aug. 16, 1928, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except those above 1,200 ft³/s (34.0 m³/s), which are poor. Inflow from and losses to Delaware and Raritan Canal above station. Flow slightly regulated by Carnegie Lake, capacity, 310,000,000 gal (1,173,000 m³) and several smaller reservoirs, combined capacity, 49,800,000 gal (188,500 m³).

AVERAGE DISCHARGE.--59 years, 378 ft³/s (10.70 m³/s), 19.89 in/yr (505 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft³/s (629 m³/s) Aug. 28, 1971, gage height, 18.68 ft (5.694 m) from high-water mark; minimum, about 5 ft³/s (0.14 m³/s) Sept. 16, 1923.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0100	3470	98.3	8.87	2.704	Apr. 1	1945	3390	96.0	8.75	2.667
Mar. 22	0815	*5600	159	11.15	3.399	Apr. 10	0915	3330	94.3	8.65	2.637

Minimum discharge, 7.9 ft³/s (0.22 m³/s) Sept. 12, 13, gage height, 1.19 ft (0.363 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	169	297	232	149	131	3070	794	108	83	69	15
2	3150	165	267	218	136	126	2840	566	113	64	76	12
3	1840	403	243	208	125	118	1790	447	142	48	63	11
4	832	600	230	190	123	117	1510	366	181	39	50	12
5	642	360	223	189	120	128	1740	316	136	36	50	14
6	621	327	218	184	112	137	1020	259	116	56	165	16
7	402	279	373	177	109	136	652	231	104	50	96	17
8	327	243	333	186	108	169	612	374	94	46	47	15
9	301	219	278	175	110	545	1280	365	87	40	27	15
10	1390	292	246	163	115	366	3180	292	114	33	18	16
11	2050	390	222	216	115	1200	2590	247	101	30	16	15
12	1440	1060	216	1490	117	613	1310	281	89	29	15	12
13	917	694	317	973	114	426	679	1110	80	26	14	8.2
14	616	578	527	642	114	466	600	850	77	25	14	9.1
15	469	471	370	500	115	625	831	506	76	24	24	22
16	361	379	318	367	145	703	591	347	61	23	26	15
17	291	327	306	314	179	1010	506	269	54	26	18	9.9
18	259	284	255	294	150	2140	417	246	52	57	14	80
19	245	258	225	790	138	1530	366	268	57	51	14	35
20	238	241	214	593	129	685	344	235	59	39	13	45
21	229	226	210	469	131	1610	322	325	58	28	12	36
22	219	214	214	372	165	4900	296	368	51	20	12	26
23	206	209	254	378	375	2730	278	279	51	43	12	19
24	173	202	366	325	328	1350	259	227	49	66	11	15
25	152	193	762	275	280	2200	245	192	47	56	9.9	16
26	159	600	718	242	233	2120	237	164	42	49	10	28
27	158	1230	496	213	194	1080	260	144	40	35	9.8	24
28	165	611	384	211	167	667	1170	131	40	26	9.8	18
29	194	595	318	194	151	1040	2020	119	32	147	10	16
30	181	406	282	176	---	1790	1530	98	128	104	12	15
31	164	---	254	166	---	1880	---	100	---	67	11	---
TOTAL	21391	12225	9936	11122	4547	32738	32545	10516	2439	1466	948.5	607.2
MEAN	690	408	321	359	157	1056	1085	339	81.3	47.3	30.6	20.2
MAX	3150	1230	762	1490	375	4900	3180	1110	181	147	165	80
MIN	152	165	210	163	108	117	237	98	32	20	9.8	8.2
CFSM	2.67	1.58	1.24	1.39	.61	4.09	4.21	1.31	.32	.18	.12	.08
IN.	3.08	1.76	1.43	1.60	.66	4.72	4.69	1.52	.35	.21	.14	.09

CAL YR 1979 TOTAL 223495.0 MEAN 612 MAX 7770 MIN 61 CFSM 2.37 IN 32.22
WTR YR 1980 TOTAL 140480.7 MEAN 384 MAX 4900 MIN 8.2 CFSM 1.49 IN 20.26

01402540 MILLSTONE RIVER AT WESTON, NJ

LOCATION.--Lat 40°31'47", long 74°35'19", Somerset County, Hydrologic Unit 02030105, at bridge on Wilhouski Street in Weston, 50 ft (15 m) upstream from Royce Brook, 0.8 mi (1.2 km) southwest of Alma White College, and 1.9 mi (3.0 km) north of Millstone.

DRAINAGE AREA.--271 mi² (702 km²), includes approximately 13 mi² (34 km²) which drains into Delaware and Raritan canal.

WATER-QUALITY RECORD

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 11...	1330	1590	149	7.1	10.0	9.6	1.9	--	--	47
FEB 20...	1000	E64	245	7.3	2.0	11.8	4.0	<20	<2	70
APR 10...	1245	E4050	115	7.1	13.0	9.0	1.8	3500	1600	33
JUN 03...	1300	E64	216	7.9	22.5	7.8	5.2	170	230	59
JUL 15...	1115	--	278	--	25.0	12.4	4.6	140	20	88
AUG 19...	1200	--	300	--	23.0	8.2	5.7	20	<20	96

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 11...	11	4.8	8.9	2.6	33	0	27	.0	21	9.8
FEB 20...	17	6.8	15	2.7	39	0	32	--	33	23
APR 10...	8.1	3.2	6.0	1.8	21	0	17	--	17	7.9
JUN 03...	14	5.9	14	2.5	45	0	37	.1	30	16
JUL 15...	23	7.4	18	3.8	--	--	--	--	35	25
AUG 19...	25	8.2	18	4.2	--	--	--	--	42	24

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	.1	12	98	1.8	--	--	2.0	3.8	.33	5.0
FEB 20...	.2	9.0	140	3.4	.580	1.5	2.1	5.5	.70	2.9
APR 10...	.1	7.5	75	1.4	.120	--	--	--	.50	5.1
JUN 03...	.2	3.4	151	2.0	.250	2.2	2.5	4.5	1.5	6.4
JUL 15...	.3	4.2	164	1.2	.120	.98	1.1	2.3	1.1	--
AUG 19...	.3	8.9	189	.30	.030	.10	.13	.43	1.1	3.0

01402540 MILLSTONE RIVER AT WESTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
11...	1330	40	1	--	0	--	0	--	20	--
15...	1030	--	--	0	--	--	--	<10	--	20
JUN										
03...	1300	10	2	--	0	70	0	--	<10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT										
11...	11	--	1400	--	6	--	60	--	.2	--
15...	--	20	--	17000	--	40	--	400	--	.00
JUN										
03...	4	--	580	--	3	--	110	--	.2	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	10	0	--	30	--	1	--	--	--	--
15...	--	--	0	--	120	--	15	.0	.0	0
JUN										
03...	2	0	--	20	--	2	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT										
11...	--	--	--	--	--	--	--	--	--	--
15...	20	16	3.3	.0	.4	.0	.0	.0	.0	.0
JUN										
03...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
11...	--	--	--	--	--	--	--	--	--	--
15...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
JUN										
03...	--	--	--	--	--	--	--	--	--	--

01402600 ROYCE BROOK TRIBUTARY NEAR BELLE MEAD, NJ

LOCATION.--Lat 40°29'56", long 74°39'05", Somerset County, Hydrologic Unit 02030105, on right bank 25 ft (7.6 m) upstream from bridge on State Highway 514 (Amwell Road), 1,200 ft (370 m) upstream from mouth, and 2.0 mi (3.2 km) north of Belle Mead.

DRAINAGE AREA.--1.20 mi^2 (3.11 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1974, January to September 1980.

REVISED RECORDS.--WRD-NJ 1969: 1967, 1968.

GAGE.--Water-stage recorder and concrete control. Datum of gage is about 68 ft (20.7 m) National Geodetic Vertical Datum of 1929. Prior to September 1974 at same site at datum of 67.77 ft (20.623 m).

REMARKS.--Water-discharge records fair. Storm-water detention basin completed above station in summer of 1980.

AVERAGE DISCHARGE.--8 years (water years 1967-74), 2.39 ft^3/s (0.0677 m^3/s), 27.05 in/yr (687 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft^3/s (41.1 m^3/s) Aug. 28, 1971, gage height, 7.01 ft (2.137 m) datum then in use, from high-water mark, from rating curve extended above 140 ft^3/s (3.96 m^3/s) on basis of slope-area measurement of peak flow; no flow on some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s (2.83 m^3/s) and maximum (*) for period January to September:

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 21	1420	*208	5.89	4.32	1.317	Apr. 28	1315	142	4.02	3.72	1.134
Apr. 9	1210	127	3.60	3.59	1.094						

No flow June 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	.24	.30	20	2.9	.21	.69	.19	.02
2				---	.25	.30	4.3	1.6	.87	.27	.16	.02
3				---	.27	.30	2.4	1.2	.68	.22	.47	.01
4				---	.30	.01	11	.87	.29	.16	.16	.01
5				---	.34	.36	3.5	.73	.15	.78	.84	.01
6				---	.35	.41	1.8	.62	.12	1.1	.62	.02
7				---	.31	.29	1.3	.86	.30	.24	.21	.01
8				---	.32	1.3	1.1	3.6	.34	.21	.16	.01
9				---	.40	2.2	31	1.0	.94	.16	.14	.01
10				---	.41	4.2	11	.62	.73	.14	.11	.01
11				---	.36	10	3.1	.55	.25	.13	.10	.01
12				---	.34	2.4	2.1	1.7	.15	.23	.22	.01
13				---	.31	1.4	1.6	6.1	.12	.11	.14	.01
14				---	.37	2.6	4.5	1.5	.10	.08	.10	.01
15				---	1.4	3.9	5.2	.72	.10	.15	.52	.02
16				---	1.6	6.2	1.7	.71	.24	.14	.22	.02
17				---	.81	13	1.1	.54	.09	.15	.10	.67
18				---	.43	14	.91	.97	.04	.09	.08	2.4
19				---	1.0	3.2	.73	.47	.28	.08	.09	.16
20				---	1.3	2.0	.67	.34	.30	.05	.19	.11
21				---	1.1	53	.63	2.5	.11	.07	.05	.11
22				1.5	2.5	13	.54	.91	.02	.49	.05	.11
23				1.3	1.8	4.3	.47	.52	.01	4.1	.08	.08
24				.84	.99	4.0	.41	.45	.01	.51	.10	.07
25				.64	.74	21	.40	.43	.00	.30	.06	.12
26				.59	.55	3.4	.38	.31	.00	.18	.05	.17
27				.51	.43	2.0	1.1	.21	.18	.13	.03	.05
28				.49	.39	1.5	33	.29	.14	.10	.03	.05
29				.42	.35	12	22	.15	.70	2.0	.03	.05
30				.35	---	6.1	4.7	.15	3.4	.43	.03	.06
31				.31	---	26	---	.21	---	.21	.02	---
TOTAL				---	19.96	214.67	172.64	33.73	10.87	13.70	5.35	4.42
MEAN				---	.69	6.92	5.75	1.09	.36	.44	.17	.15
MAX				---	2.5	53	33	6.1	3.4	4.1	.84	2.4
MIN				---	.24	.01	.38	.15	.00	.05	.02	.01
CFSM				---	.58	5.77	4.79	.91	.30	.37	.14	.13
IN.				---	.62	6.65	5.35	1.04	.34	.42	.17	.14

01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'05", long 74°32'54", Somerset County, Hydrologic Unit 02030105, on right bank 1,000 ft (305 m) downstream from Calco Dam and Cuckold Brook, 1,400 ft (427 m) upstream of bridge on Interstate 287 1.2 mi (1.9 km) downstream from Millstone River, and 1.2 mi (1.9 km) southwest of Bound Brook.

DRAINAGE AREA.--785 mi^2 (2.033 km^2), includes 11 mi^2 (28 km^2) which drains into the Delaware and Raritan Canal.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1903 to March 1909, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1966 published as "Raritan River at Bound Brook" (station 01403000).

REVISED RECORDS.--WSP 1552: 1903-07, 1946(M), 1949, 1952(P).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Sept. 12, 1903 to Mar. 31, 1909, nonrecording gages at highway bridge, 1.2 mi (1.9 km) downstream at different datum. October 1944 to Sept. 30, 1966, water-stage recorder and concrete control at site 1,120 ft (341 m) upstream at datum 18.06 ft (5.505 m) higher.

REMARKS.--Water-discharge records good. Water diverted 1.9 mi (3.0 km) above station by Elizabethtown Water Co. for municipal supply (see Raritan River Basin, diversions). Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversions to Round Valley Reservoir (see Raritan River Basin, diversions). Slight diurnal fluctuations at low flow.

AVERAGE DISCHARGE.--41 years, (water years 1904-08, 1945-80), 1,289 ft^3/s (36.52 m^3/s), adjusted for diversion by Elizabethtown Water Co. since 1944, and change in contents in Spruce Run Reservoir since 1964 and Round Valley Reservoir since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,100 ft^3/s (1.310 m^3/s) Aug. 28, 1971, elevation, 37.47 ft (11.421 m), from floodmark; minimum daily, 37 ft^3/s (1.05 m^3/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,000 ft^3/s (340 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Elevation (ft)	Elevation (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Elevation (ft)	Elevation (m)
Oct. 2	0115	12800	362	25.19	7.678	Apr. 1	0645	12000	340	24.87	7.580
Mar. 22	0615	*25300	176	29.80	9.083	Apr. 10	0100	13800	391	25.59	7.800

Minimum discharge, 52 ft^3/s (1.47 m^3/s) Sept. 19, 20, elevation, 16.26 ft (4.956 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6420	664	1280	903	448	410	11000	2760	569	340	223	176
2	8920	666	1140	852	514	503	7670	2040	594	246	242	154
3	4430	2680	1020	772	447	436	4820	1680	608	236	311	142
4	2890	3030	963	686	456	467	5680	1440	875	230	217	152
5	2130	1630	935	654	426	429	5250	1250	588	247	170	163
6	3360	1410	908	586	415	377	3290	1080	422	569	332	174
7	1870	1260	1670	543	407	359	2460	988	387	404	231	169
8	1470	1140	1260	676	392	433	2140	1580	469	217	179	164
9	1290	1010	1020	657	380	1410	6080	1360	482	211	168	134
10	4290	1190	911	588	374	914	11600	1060	653	200	183	160
11	5490	1440	887	834	332	2380	6600	935	533	169	169	169
12	3610	3560	850	6040	367	1380	3920	1050	397	196	186	168
13	2930	2300	1200	2630	313	956	2680	3490	318	169	172	175
14	2050	1830	1980	1840	321	963	2500	2570	284	152	160	178
15	1600	1540	1340	1670	334	1360	3480	1590	282	149	173	189
16	1390	1320	1170	1380	450	1470	2490	1190	258	179	211	169
17	1190	1200	1310	1210	490	2280	1930	1080	225	226	182	171
18	1060	1110	1010	1150	376	8870	1630	1030	207	237	173	660
19	1010	992	882	2730	368	4860	1480	931	214	205	159	130
20	957	919	863	1900	376	2550	1380	838	227	185	163	167
21	911	864	775	1500	399	7320	1300	1150	259	138	160	199
22	856	798	883	1300	519	20800	1180	1350	220	163	161	176
23	854	770	929	1250	1160	8340	1070	976	192	310	157	152
24	805	738	1340	1050	1180	4410	1000	811	182	224	147	140
25	797	709	3230	946	829	8040	945	710	187	144	136	157
26	721	2490	2620	845	661	5710	916	605	183	142	138	203
27	681	4900	1740	774	500	3540	966	516	198	161	133	177
28	718	2180	1420	789	438	2580	4850	447	234	168	123	153
29	913	1870	1230	748	397	3460	7400	387	229	409	191	138
30	751	1520	1120	585	---	5360	4430	339	858	367	183	147
31	622	---	997	519	---	7330	---	404	---	186	190	---
TOTAL	66986	47730	38883	38607	14069	109697	112137	37637	11334	7179	5723	5406
MEAN	2161	1591	1254	1245	485	3539	3738	1214	378	232	185	180
MAX	8920	4900	3230	6040	1180	20800	11600	3490	875	569	332	660
MIN	622	664	775	519	313	359	916	339	182	138	123	130

CAL YR 1979 TOTAL 738252 MEAN 2023 MAX 29800 MIN 199
WTR YR 1980 TOTAL 495388 MEAN 1354 MAX 20800 MIN 123

01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ

LOCATION.--Lat 40°36'44", long 74°35'28", Somerset County, Hydrologic Unit 02030105, on left bank 150 ft (45.7 m) upstream from bridge on Crim Road, 1.4 mi (2.3 km) northwest of Martinsville, and 1.8 mi (2.9 km) upstream from confluence with East Branch Middle Brook.

DRAINAGE AREA.--1.99 mi^2 (5.15 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240.48 ft (73.30 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 439 ft^3/s (12.4 m^3/s) Mar. 21, 1980, gage height, 4.96 ft (1.512 m); no flow Sept. 19-30, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.25 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 11	2000	153	4.33	4.01	1.222
Mar. 21	1425	*439	12.4	4.96	1.512
Apr. 9	1230	286	8.10	4.52	1.378
Apr. 28	1250	168	4.77	4.08	1.244

No flow Sept. 19-30, 1980.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	1.9	1.1	1.0	.64	.65	18	3.4	.61	.08	.02	.12
2	2.8	2.1	1.0	.99	.66	.54	6.6	2.6	.54	.05	.02	.09
3	2.9	15	.94	.88	.62	.52	4.8	2.2	1.2	.05	.02	.07
4	1.6	2.8	.98	.91	.64	.55	18	1.8	.60	.05	.02	.08
5	1.8	1.7	.93	.91	.63	.71	5.9	1.6	.47	.50	.02	.12
6	1.4	1.5	2.9	.91	.62	.66	4.2	1.6	.41	.34	.04	.12
7	1.1	1.3	5.6	.85	.64	.69	3.6	1.7	.36	.03	.05	.05
8	.90	1.2	1.8	.74	.66	2.1	3.3	6.3	.50	.03	.11	.05
9	1.8	1.1	1.4	.68	.68	2.1	54	2.4	.58	.02	.11	.05
10	15	3.5	1.3	.68	.66	2.9	13	1.8	.63	.02	.11	.04
11	4.1	4.5	1.2	16	.61	10	4.8	1.6	.40	.02	.12	.04
12	3.3	11	1.1	9.5	.53	1.7	3.8	3.8	.34	.02	.14	.03
13	2.6	2.8	6.3	1.8	.49	1.9	3.3	6.9	.26	.01	.10	.03
14	1.5	2.5	2.6	1.8	.50	3.9	7.4	3.3	.26	.01	.12	.04
15	1.3	1.8	1.6	1.8	.50	1.7	6.8	1.9	.25	.02	.16	.05
16	1.1	1.7	1.7	1.5	2.0	2.1	3.6	1.5	.23	.03	.14	.04
17	.98	1.5	2.5	1.2	1.2	16	2.9	1.2	.19	.03	.12	1.2
18	.90	1.3	1.1	3.4	.59	28	2.6	1.7	.17	.02	.10	1.1
19	.90	1.1	1.3	6.8	.55	4.3	2.3	1.5	.13	.02	.24	.00
20	.92	1.1	1.1	2.1	.57	3.4	2.2	1.3	.13	.03	.24	.00
21	1.0	.99	1.0	1.6	.61	83	2.2	4.2	.12	.04	.25	.00
22	1.2	.99	1.3	1.4	2.1	14	1.8	1.8	.09	.13	.23	.00
23	1.9	.99	2.4	1.5	3.8	5.9	1.7	1.2	.09	.10	.22	.00
24	3.4	.98	3.7	1.3	1.5	5.6	1.6	.95	.07	.07	.20	.00
25	2.7	.97	12	.90	1.1	21	1.5	.81	.05	.06	.17	.00
26	2.4	17	2.9	.94	.94	5.4	1.4	.62	.05	.07	.12	.00
27	2.3	3.4	1.8	.84	.87	4.1	1.8	.57	.19	.08	.10	.00
28	3.7	2.1	1.5	.78	1.1	3.6	33	.51	.23	.07	.11	.00
29	2.9	1.6	1.3	.88	.79	15	10	.50	1.3	.52	.10	.00
30	2.2	1.3	1.2	.71	---	8.0	4.6	.47	1.8	.03	.10	.00
31	2.1	---	1.1	.70	---	38	---	.52	---	.02	.12	---
TOTAL	83.70	91.72	68.65	66.00	26.80	288.02	230.7	62.25	12.25	2.57	3.72	3.32
MEAN	2.70	3.06	2.21	2.13	.92	9.29	7.69	2.01	.41	.083	.12	.11
MAX	15	17	12	16	3.8	83	54	6.9	1.8	.52	.25	1.2
MIN	.90	.97	.93	.68	.49	.52	1.4	.47	.05	.01	.02	.00
CFSM	1.36	1.54	1.11	1.07	.46	4.67	3.86	1.01	.21	.04	.06	.06
IN.	1.56	1.71	1.28	1.23	.50	5.38	4.31	1.16	.23	.05	.07	.06

WTR YR 1980 TOTAL 939.70 MEAN 2.57 MAX 83 MIN .00 CFSM 1.29 IN 17.56

01403400 GREEN BROOK AT SEELEY MILLS, NJ

LOCATION.--Lat 40°39'53", long 74°24'10", Somerset County, Hydrologic Unit 02030105, on right bank at Seeley Mills, 250 ft (76.2 m) downstream from Blue Brook, 300 ft (91.4 m) downstream from bridge on Diamond Hill Road, and 0.5 mi (0.8 km) northwest of Scotch Plains.

DRAINAGE AREA.--6.23 mi^2 (16.14 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-64, 1969: annual maximum, water years 1969-79. June 1979 to current year. Fragmentary records 1944-53 in the files of the Geological Survey. Crest-stage data 1927-38, 1958-68 in files of Union County Park Commission.

GAGE.--Water-stage recorder. Datum of gage is 184.44 ft (56.217 m) National Geodetic Vertical Datum of 1929. From 1944 to 1953, water-stage recorder and masonry dam about 400 ft (122 m) downstream above lower Seeley Mills dam at different datum. From July 1969 to May 1979, crest-stage gage about 450 ft (137 m) downstream below lower Seeley Mills dam (washed out May 29, 1968) at different datum.

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft^3/s (177 m^3/s) Aug. 2, 1973, gage height, 16.1 ft (4.91 m), on basis of slope-area measurement of peak flow, site and datum then in use; minimum, 0.07 ft^3/s (0.002 m^3/s) Sept. 7, 8, 12, 13, 1980, gage height, 1.08 ft (0.329 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1938 reached an elevation of 196.5 ft (59.893 m) New Jersey Geological Survey datum, above lower Seeley Mills dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	1600	*667	18.9	3.92	1.195	Apr. 28	1300	576	16.3	3.69	1.125
Apr. 9	1305	381	10.8	3.15	0.960	June 30	0010	286	8.10	2.85	0.869

Minimum discharge, 0.07 ft^3/s (0.002 m^3/s) Sept. 7, 8, 12, 13, gage height, 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	5.0	6.5	6.9	2.8	1.9	69	20	2.9	1.9	1.2	1.8
2	21	5.2	6.1	6.8	2.7	1.9	35	15	2.6	1.6	3.0	1.3
3	17	20	5.6	6.3	2.6	1.8	24	11	3.5	1.8	1.8	1.2
4	12	8.1	5.6	5.8	2.5	2.0	53	8.8	3.0	1.7	1.3	1.1
5	11	6.1	5.3	6.2	2.5	2.6	27	7.4	2.4	4.1	1.3	1.3
6	11	5.5	9.1	5.5	2.5	2.4	20	6.5	2.2	5.0	1.4	1.0
7	7.7	5.5	18	5.5	2.5	2.3	17	7.4	3.5	1.6	1.5	.27
8	6.1	5.3	9.3	5.3	2.4	5.2	15	21	3.2	1.6	1.7	.39
9	9.7	5.2	8.2	4.9	2.5	5.2	160	8.4	3.4	1.9	2.1	.98
10	29	12	7.9	4.7	2.5	13	81	5.9	3.7	2.0	2.2	.84
11	22	13	7.4	23	2.4	48	27	5.5	2.5	1.9	2.2	.49
12	18	24	7.1	34	2.9	9.0	21	16	2.0	1.7	2.6	.12
13	14	11	18	11	2.4	5.1	18	19	1.9	1.4	1.2	.43
14	10	10	13	8.9	2.2	9.7	26	9.8	1.8	1.5	1.3	.67
15	7.6	7.6	9.4	8.5	2.2	7.5	29	6.5	1.8	1.5	1.6	1.9
16	6.9	7.0	9.2	7.0	5.9	7.1	17	5.6	2.0	1.6	1.4	1.2
17	6.4	6.6	12	7.0	3.2	30	14	5.2	1.6	2.0	1.5	3.1
18	6.1	6.5	8.5	9.0	2.4	76	12	5.7	1.6	2.1	1.5	19
19	5.9	6.0	8.0	19	2.3	21	11	5.3	1.5	1.3	1.6	1.7
20	5.7	5.4	8.0	9.3	2.3	14	10	4.9	1.5	1.2	1.8	1.5
21	5.5	5.2	7.6	7.7	2.4	200	9.1	8.5	1.4	1.2	1.6	1.4
22	5.5	4.9	8.0	7.4	4.2	102	7.4	5.3	1.4	3.1	1.3	.73
23	5.6	4.9	9.8	7.5	8.2	38	6.9	4.3	1.4	2.9	1.3	.93
24	6.5	4.7	13	6.5	3.9	28	6.6	3.9	1.4	1.3	1.4	1.8
25	6.3	4.7	34	5.1	3.3	84	6.3	3.5	1.4	1.1	1.3	1.7
26	6.0	44	15	4.6	2.8	27	5.9	3.1	1.5	1.2	1.4	2.2
27	5.8	17	10	3.9	2.5	20	6.6	2.9	1.4	1.1	1.3	1.6
28	7.6	10	8.3	3.7	2.4	17	141	2.7	1.4	1.0	1.2	2.0
29	6.2	8.5	7.7	3.6	2.1	44	50	2.6	2.6	3.8	1.3	2.3
30	5.4	7.3	7.6	3.3	---	33	25	2.5	21	1.5	1.2	2.6
31	5.1	---	7.4	3.1	---	91	---	2.7	---	1.1	1.3	---
TOTAL	334.6	286.2	310.6	251.0	85.5	949.7	950.8	236.9	83.5	58.7	48.8	57.55
MEAN	10.8	9.54	10.0	8.10	2.95	30.6	31.7	7.64	2.78	1.89	1.57	1.92
MAX	42	44	34	34	8.2	200	160	21	21	5.0	3.0	19
MIN	5.1	4.7	5.3	3.1	2.1	1.8	5.9	2.5	1.4	1.0	1.2	.12
CFSM	1.73	1.53	1.61	1.30	.47	4.91	5.09	1.23	.45	.30	.25	.31
IN.	2.00	1.71	1.85	1.50	.51	5.67	5.68	1.41	.50	.35	.29	.34

WTR YR 1980 TOTAL 3653.85 MEAN 9.98 MAX 200 MIN .12 CFSM 1.60 IN 21.81

01403500 GREEN BROOK AT PLAINFIELD, NJ

LOCATION.--Lat 40°36'53", long 74°25'55", Union County, Hydrologic Unit 02030105, on left bank 20 ft (6 m) downstream from bridge on Sycamore Avenue in Plainfield, and 1.0 mi (1.6 km) upstream from Stony Brook.

DRAINAGE AREA.--9.75 mi² (25.25 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 921: 1938-40. WRD-NJ 1969: 1966-68. WRD-NJ 1973: 1968(M), 1969(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 70.37 ft (21.449 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those from Dec. 18 to Mar. 18, which are poor. Water diverted from Baltusrol well field by Commonwealth Water Co., and from wells in vicinity of Mountainside and Scotch Plains by Plainfield-Union Water Co., for municipal supply and from private and industrial wells in Plainfield and vicinity. Diurnal fluctuations at low flow caused by pumping from wells near brook in Plainfield. During extreme high stages there is some overflow above gage from Green Brook basin to adjacent Cedar Brook basin.

AVERAGE DISCHARGE.--42 years, 12.8 ft³/s (0.362 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft³/s (81.8 m³/s) July 23, 1938, gage height, 5.82 ft (1.774 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of contracted-opening measurement of peak flow (an unknown additional amount probably overflowed out of the basin); no flow part or all of some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 21	1745	525	14.9	2.78	0.847	June 30	0015	593	16.8	2.94	0.896
Apr. 9	1245	391	11.1	2.44	0.744	July 5	2230	505	14.3	2.73	0.832
Apr. 28	1245	*699	19.8	3.20	0.975						

No flow part of Sept. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	2.8	6.7	6.6	2.4	3.1	114	23	4.7	2.8	2.0	.75
2	26	3.1	6.2	6.2	2.3	2.1	51	17	3.7	2.0	2.4	.44
3	18	28	6.1	5.7	2.2	2.0	31	15	7.4	2.0	3.2	.23
4	11	8.0	5.9	4.5	2.1	2.1	79	12	4.5	2.0	2.2	.19
5	13	6.0	5.3	4.7	2.1	2.3	35	11	2.8	26	1.8	.26
6	12	6.1	6.0	4.1	2.1	3.1	23	11	2.4	16	1.1	.45
7	8.2	6.9	25	4.5	2.1	2.9	18	12	8.6	2.1	.88	.23
8	6.2	7.5	10	4.7	3.3	3.6	15	31	5.8	1.9	.78	.11
9	15	7.6	7.4	4.1	2.1	9.3	153	12	6.4	1.5	.75	.11
10	49	21	6.7	3.6	2.1	7.7	102	9.3	7.3	1.5	.51	.46
11	21	17	6.3	6.7	2.1	31	39	8.5	3.2	1.4	.59	.29
12	16	44	5.9	36	2.4	17	27	26	2.4	1.3	2.3	.10
13	13	12	12	19	2.0	12	22	33	2.1	.79	.69	.08
14	8.2	12	19	13	1.9	18	32	16	2.0	.65	.38	.15
15	6.6	8.7	13	11	2.2	15	40	11	1.9	.88	.83	1.5
16	6.0	7.7	10	9.1	6.8	11	21	9.0	2.0	1.8	.75	.44
17	5.3	6.9	11	7.4	5.6	23	16	7.9	1.8	2.1	.29	3.5
18	4.7	6.6	8.7	7.4	3.1	84	14	9.6	1.7	1.8	.55	75
19	4.3	6.8	6.9	18	2.7	26	13	8.5	1.6	1.2	.95	2.4
20	4.1	5.9	5.9	15	2.6	17	12	7.4	1.6	.52	.74	1.6
21	3.7	5.0	5.5	11	2.8	203	11	20	1.5	.40	.69	1.4
22	3.5	4.4	6.3	8.9	4.2	137	9.7	9.3	1.4	8.8	.47	.99
23	3.2	4.4	7.3	8.4	7.3	62	9.0	6.9	1.4	6.6	.24	.43
24	4.0	4.1	11	6.8	7.8	35	8.4	6.0	1.4	1.4	.22	1.1
25	3.5	3.9	42	6.0	7.3	58	7.7	5.5	1.6	1.1	.22	2.1
26	3.1	83	20	5.8	6.8	38	7.0	4.4	1.8	1.0	.29	3.6
27	2.7	24	12	5.1	3.7	25	9.4	4.0	1.9	1.0	.46	.97
28	7.0	12	10	4.8	3.5	19	187	3.7	1.6	.81	.27	.95
29	4.8	9.2	8.4	4.1	3.2	68	66	3.6	9.0	17	.32	.95
30	3.4	7.6	7.4	3.6	---	49	30	3.4	62	2.5	.39	1.6
31	2.9	---	7.1	2.5	---	150	---	4.2	---	1.2	.17	---
TOTAL	368.4	382.2	321.0	258.3	100.8	1136.2	1202.2	361.2	157.5	112.05	27.43	102.38
MEAN	11.9	12.7	10.4	8.33	3.48	36.7	40.1	11.7	5.25	3.61	.88	3.41
MAX	79	83	42	36	7.8	203	187	33	62	26	3.2	75
MIN	2.7	2.8	5.3	2.5	1.9	2.0	7.0	3.4	1.4	.40	.17	.08

CAL YR 1979 TOTAL 6890.11 MEAN 18.9 MAX 321 MIN .81
WTR YR 1980 TOTAL 4529.66 MEAN 12.4 MAX 203 MIN .08

01403535 EAST BRANCH STONY BROOK AT BEST LAKE AT WATCHUNG, NJ

LOCATION.--Lat 40°38'25", long 74°26'52", Somerset County, Hydrologic Unit 02030105, 700 ft (213 m) upstream of dam on Best Lake in Watchung, 1,400 ft (427 m) upstream of mouth, and 2.5 mi (4.0 km) west of Plainfield railroad station.

DRAINAGE AREA.--1.57 mi^2 (4.07 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1980.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 194.5 ft (59.28 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Records given herein represent flow over dam and leakage.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 3, 1973, reached a stage of 4.76 ft (1.451 m) present datum, from floodmarks, discharge, 2,840 ft^3/s (80.4 m^3/s) by computation of flow over dam, embankment and road.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft^3/s (0.85 m^3/s) and maximum (*) for period July to September:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 5	2305	42	1.19	1.46	0.445
Sept. 18	0035	57	1.61	1.52	0.463

No flow Aug. 30, Sept. 3-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								†4.15		.60	.27	.02
2										.35	.21	.01
3										.30	.19	.00
4										.27	.18	.00
5										1.9	.20	.00
6										1.6	.21	.00
7										.35	.12	.00
8										.30	.08	.00
9										.26	.06	.00
10										.23	.05	.00
11										.20	.06	.00
12										.17	.13	.00
13										.13	.08	.00
14										.11	.06	.00
15										.10	.08	.01
16										.13	.08	.03
17										.16	.05	1.0
18										.13	.05	5.0
19										.11	.07	.29
20										.10	.09	.18
21										.07	.07	.18
22						†29.1				.26	.06	.18
23										.69	.06	.15
24										.25	.08	.09
25						†10.0				.18	.06	.15
26										.15	.14	.26
27										.18	.11	.15
28										.12	.03	.13
29										1.1	.01	.13
30										.40	.00	.13
31										.24	.01	---
TOTAL										11.14	2.95	8.09
MEAN										.36	.095	.27
MAX										1.9	.27	5.0
MIN										.07	.00	.00
CFSM										.23	.06	.17
IN.										.26	.07	.19

† Result of discharge measurement.

01403540 STONY BROOK AT WATCHUNG, NJ

LOCATION.--Lat 40°38'12", long 74°27'06", Somerset County, Hydrologic Unit 02030105, on right bank at Watchung Borough Administration Building, 150 ft (45.7 m) downstream from Watchung Avenue Bridge, and 2.9 mi (4.7 km) upstream from confluence with Green Brook.

DRAINAGE AREA.--5.51 mi² (14.27 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 172.24 ft (52.499 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation from Watchung and Best Lakes directly upstream from station.

AVERAGE DISCHARGE.--6 years, 11.3 ft³/s (0.320 m³/s), 27.85 in/yr (707 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft³/s (125 m³/s) July 14, 1975, gage height, 10.40 ft (3.170 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurements of peak flow; minimum, 0.34 ft³/s (0.010 m³/s) Aug. 3, 4, 1978, gage height, 0.92 ft (0.280 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1973, reached a stage of 14.5 ft (4.42 m), from floodmark, discharge, 11,400 ft³/s (323 m³/s) from slope-area measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 21	1445	*793	22.5	5.46	1.664	Apr. 28	1250	726	20.6	5.23	1.594
Apr. 9	1230	391	11.1	4.19	1.277						

Minimum discharge, 0.68 ft³/s (0.019 m³/s) several days in August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	3.3	6.1	5.7	3.6	3.1	80	21	2.1	1.7	1.1	.73
2	12	3.2	5.7	5.5	3.5	3.0	39	13	1.9	1.3	1.0	.72
3	8.1	26	5.3	5.2	3.3	2.9	26	3.6	2.7	1.3	.98	.72
4	5.2	9.5	5.1	4.7	3.2	2.9	62	3.3	2.1	1.3	.91	.72
5	4.3	6.5	4.9	4.9	3.2	3.2	29	20	1.7	1.8	.91	.73
6	3.7	5.9	6.7	4.5	3.2	3.1	20	15	1.6	22	.92	.70
7	3.6	5.8	18	4.3	3.1	2.9	16	12	2.7	1.8	.87	.70
8	4.7	5.3	7.2	4.1	3.0	6.4	14	8.9	2.5	1.5	.83	.70
9	7.5	4.9	6.1	3.9	3.0	9.6	151	2.4	2.3	1.4	.82	.71
10	34	14	5.8	3.7	3.0	13	65	2.1	3.1	1.3	.78	.73
11	20	10	5.5	21	2.9	55	31	2.0	2.0	1.3	.81	.73
12	16	36	5.2	32	2.9	9.2	23	3.5	1.8	1.2	.90	.73
13	13	12	16	8.6	2.7	7.0	18	12	1.7	1.1	.87	.73
14	10	11	9.7	7.7	2.7	9.0	31	6.7	1.6	1.1	.83	.74
15	8.5	8.3	7.0	7.5	2.7	7.9	33	4.6	1.6	1.0	.85	.81
16	6.8	7.4	6.8	6.5	5.5	7.9	17	3.9	1.5	1.1	.86	.76
17	6.1	6.8	8.5	5.9	4.1	35	13	3.4	1.4	1.3	.80	1.5
18	4.6	6.3	6.0	7.3	3.1	75	12	3.9	1.4	1.1	.79	21
19	4.5	5.9	5.8	21	2.9	19	10	3.7	1.4	.97	.80	1.3
20	4.4	5.6	5.6	8.6	2.9	14	9.6	3.1	1.3	.92	.85	.93
21	4.1	5.2	5.3	7.2	3.0	186	9.0	7.9	1.3	.84	.85	.85
22	3.9	5.1	5.5	6.9	4.3	84	7.6	3.4	1.3	1.6	.81	.84
23	3.8	4.9	6.9	7.2	8.4	38	6.9	1.5	1.2	1.7	.78	.86
24	4.2	4.6	9.8	5.9	5.5	32	6.3	1.8	1.2	1.1	.80	.80
25	3.8	4.5	35	5.4	4.4	87	6.0	2.5	1.2	.95	.76	.87
26	3.6	43	12	5.0	4.0	30	5.5	2.2	1.1	.88	.78	.99
27	3.4	16	9.3	4.7	3.6	22	7.0	2.1	1.1	.86	.75	.74
28	4.6	9.6	7.8	4.6	3.5	17	145	2.0	1.2	.87	.72	.72
29	4.6	7.8	7.1	4.3	3.2	57	48	1.9	1.1	2.4	.73	.73
30	3.7	6.7	6.6	4.0	---	39	25	1.8	19	1.4	.71	.73
31	3.4	---	6.2	3.8	---	100	---	2.0	---	1.1	.75	---
TOTAL	253.1	301.1	258.5	231.6	104.4	981.1	965.9	177.2	68.1	60.19	25.92	44.52
MEAN	8.16	10.0	8.34	7.47	3.60	31.6	32.2	5.72	2.27	1.94	.84	1.48
MAX	34	43	35	32	8.4	186	151	21	19	22	1.1	21
MIN	3.4	3.2	4.9	3.7	2.7	2.9	5.5	1.5	1.1	.84	.71	.70
CFSM	1.48	1.82	1.51	1.36	.65	5.74	5.84	1.04	.41	.35	.15	.27
IN.	1.71	2.03	1.74	1.56	.70	6.62	6.52	1.20	.46	.41	.17	.30

CAL YR 1979 TOTAL 5079.98 MEAN 13.9 MAX 235 MIN .62 CFSM 2.52 IN 34.29
WTR YR 1980 TOTAL 3471.63 MEAN 9.49 MAX 186 MIN .70 CFSM 1.72 IN 23.43

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ
(National stream-quality accounting network and Pesticide program station)

LOCATION.--Lat 40°30'47", long 74°32'24", Somerset County, Hydrologic Unit 02030105, at bridge on Interstate Route 287, 0.2 mi (0.3 km) downstream from Fieldsville Dam, and 1.5 mi (2.4 km) southeast of South Bound Brook.

DRAINAGE AREA.--862 mi² (2,233 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1969 to March 1977.
pH: May 1969 to March 1977.
WATER TEMPERATURES: May 1969 to March 1977.
DISSOLVED OXYGEN: May 1969 to March 1977.

REMARKS.--Instantaneous water discharge estimated from discharge at 01403060, Raritan River below Calco Dam, at Bound Brook, 01403900 Bound Brook at Middlesex, and drainage area relationship.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 22...	1230	E870	293	7.1	17.0	4.0	8.6	3.0	440	78
NOV 15...	1320	E1550	253	6.8	7.0	6.0	11.8	1.2	300	62
DEC 05...	1220	E960	212	7.0	4.0	2.0	12.5	1.1	--	23
JAN 15...	1305	E1720	243	6.7	4.5	2.6	--	2.1	180	120
FEB 06...	1315	E420	440	7.6	.5	1.0	14.0	4.8	K1	<2
MAR 26...	1320	E5700	162	7.1	5.5	50	11.6	2.3	250	920
APR 23...	1300	E1190	263	7.9	16.0	2.8	10.4	2.1	K6	K8
MAY 20...	1035	E960	282	7.6	19.0	4.8	7.9	5.2	92	K16
JUN 18...	1045	E195	510	7.4	22.0	.35	7.2	7.0	210	820
JUL 21...	1100	E138	478	7.8	29.0	2.0	5.2	3.9	150	3300
AUG 05...	1015	E180	432	--	27.5	7.0	6.0	5.7	960	1000
SEP 09...	1100	E129	537	7.1	22.0	2.6	5.6	6.0	K59	960

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 22...	80	21	6.8	19	2.4	31	40	28	.1	11
NOV 15...	73	19	6.2	17	2.4	33	38	22	.1	13
DEC 05...	85	22	7.3	23	2.6	43	39	30	.2	13
JAN 15...	69	18	5.9	16	2.3	41	35	25	.1	11
FEB 06...	110	30	8.9	32	3.3	60	52	44	.2	12
MAR 26...	48	12	4.4	11	1.8	31	21	13	.1	9.9
APR 23...	76	20	6.3	18	2.0	43	35	26	.1	9.1
MAY 20...	73	18	6.7	24	2.0	30	38	27	.1	10
JUN 18...	120	36	8.4	40	3.7	27	81	57	.2	7.0
JUL 21...	120	36	8.3	39	3.7	27	77	54	.2	6.9
AUG 05...	120	34	8.1	42	3.4	34	67	52	.2	9.1
SEP 09...	120	35	8.6	43	3.3	52	68	65	.2	6.8

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 22...	173	5	89	1.7	1.7	1.900	1.900	.50	.50	2.4
NOV 15...	146	8	91	1.7	1.7	1.000	1.000	.60	.00	1.6
DEC 05...	167	3	90	1.9	1.9	1.900	1.900	.40	--	2.3
JAN 15...	143	14	82	2.0	2.0	1.200	1.100	.30	.30	1.5
FEB 06...	239	6	37	2.4	2.3	3.300	3.300	.40	.30	3.7
MAR 26...	116	45	87	1.9	.87	--	--	--	--	--
APR 23...	161	20	47	1.4	1.3	1.400	1.400	.20	.00	1.6
MAY 20...	164	13	78	1.5	.90	1.400	1.300	.50	.50	1.9
JUN 18...	303	13	69	7.1	2.7	--	3.500	--	1.0	--
JUL 21...	306	3	60	2.7	2.5	3.800	3.800	.20	.20	4.0
AUG 05...	284	21	82	2.8	2.8	2.100	2.100	1.2	.30	3.3
SEP 09...	290	10	68	2.5	2.5	4.900	4.900	5.1	.00	10

DATE	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 22...	.00	2.4	4.1	4.1	.150	.110	3.6	--	--
NOV 15...	.64	1.0	2.7	3.3	.120	.080	--	3.2	.3
DEC 05...	.00	--	--	4.2	.120	.100	2.5	--	--
JAN 15...	.10	1.4	3.4	3.5	.100	.070	4.6	--	--
FEB 06...	.10	3.6	5.9	6.1	.260	.160	--	5.9	1.0
MAR 26...	.20	--	1.3	--	.150	.050	5.0	--	--
APR 23...	.20	1.4	2.7	3.0	.120	.080	2.1	--	--
MAY 20...	.10	1.8	2.7	3.4	.160	.110	--	6.0	.3
JUN 18...	--	4.5	7.2	--	.350	.270	8.7	--	--
JUL 21...	.00	4.0	6.5	6.7	.360	.320	4.8	--	--
AUG 05...	.90	2.4	5.2	6.1	.470	.330	--	1.4	1.2
SEP 09...	5.4	4.9	7.4	12	.330	.260	5.1	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 15...	1320	2	1	1	40	0	40	1	1	0	10
FEB 06...	1315	1	0	1	100	40	60	0	0	0	10
MAY 20...	1035	2	0	2	60	--	60	1	0	1	<10
AUG 05...	1015	4	0	4	100	40	60	0	0	0	10

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV											
15...	0	10	3	3	0	6	1	5	520	430	90
FEB											
06...	0	<10	1	0	1	9	2	7	300	270	30
MAY											
20...	--	<10	0	0	0	4	0	4	490	370	120
AUG											
05...	--	<10	0	0	0	8	2	6	470	440	30

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV											
15...	10	10	0	50	10	40	.2	.1	.1	4	2
FEB											
06...	3	3	0	90	0	90	.1	.0	.1	6	3
MAY											
20...	3	3	0	90	40	50	.2	.0	.2	2	1
AUG											
05...	3	3	0	190	60	130	.1	.0	.1	7	7

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	PCB TOTAL (UG/L)
NOV											
15...	2	0	0	0	0	0	0	20	10	6	ND
FEB											
06...	3	0	0	0	0	0	0	100	0	100	ND
MAY											
20...	1	0	0	0	0	0	0	20	0	20	--
AUG											
05...	0	0	0	0	0	0	0	30	10	20	--

DATE	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)
NOV											
15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
06...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV											
15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
06...	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LENGTH OF EXPO- SURE (DAYS)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)
NOV						
15...	23	2.21	1.97	3.07	.420	78.2
FEB						
06...	20	1.26	1.10	4.02	.000	39.8
MAY						
20...	26	4.25	3.54	5.36	2.13	132
AUG						
05...	14	5.04	4.17	1.85	.470	470

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NOV 15,79		FEB 6,80		MAR 26,80		MAY 20,80	
TIME	1320		1315		1320		1035	
TOTAL CELLS/ML	770		4100		1600		11000	
DIVERSITY: DIVISION	1.4		1.7		1.4		0.7	
.CLASS	1.5		1.7		1.4		0.7	
..ORDER	1.7		1.9		1.8		1.3	
...FAMILY	1.9		2.0		2.4		1.4	
....GENUS	2.0		2.6		3.0		1.5	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	180	2
...HYDRODICTYACEAE								
....PEDIASTRUM	72	9	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	*	0	52	3	78	1
....CHLORELLA	--	-	990#	24	*	0	--	-
....CHODATELLA	--	-	*	0	*	0	*	0
....DICTYOSPHAERIUM	--	-	--	-	23	1	--	-
....KIRCHNERIELLA	--	-	38	1	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	*	0
....TETRAEDRON	--	-	--	-	*	0	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	100	1
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	23	1	230	2
....TETRASTRUM	--	-	--	-	--	-	--	-
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	57	1	12	1	65	1
....CHLOROGONIUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	240#	31	340	8	120	8	470	4
....MELOSIRA	29	4	--	-	29	2	*	0
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	14	2	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	*	0	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	*	0	*	0
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	96	2	120	8	*	0
....FRAGILARIA	--	-	--	-	--	-	*	0
....SYNEDRA	14	2	*	0	210	13	*	0
...NAVICULACEAE								
....NAVICULA	29	4	76	2	110	7	78	1
...NITZSCHIACEAE								
....NITZSCHIA	--	-	57	1	120	7	*	0
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...CHROMULINACEAE								
....CHRYSOCOCCUS	14	2	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	NOV 15,79 1320		FEB 6,80 1315		MAR 26,80 1320		MAY 20,80 1035	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	1200	11
....GOMPHOSPHAERIA	--	-	--	-	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	360#	46	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	1600#	39	640#	41	8400#	76
....SCHIZOTHRIX	--	-	480	12	81	5	--	-
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	12	1	*	0
....TRACHELOMONAS	--	-	340	8	--	-	*	0
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE TIME	JUN 13,80 1045	JUL 21,80 1100	AUG 5,80 1015	SEP 9,80 1100
TOTAL CELLS/ML	20000	14000	230000	460
DIVERSITY: DIVISION	1.1	1.5	0.2	1.0
.CLASS	1.1	1.5	0.2	1.0
..ORDER	2.0	2.0	0.4	1.5
...FAMILY	2.3	2.4	0.5	2.3
....GENUS	2.9	2.9	0.6	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	*	0	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	1700	1	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	*	0	--	-
...MICRACTINIACEAE								
....GOLENKINIA	100	1	--	-	--	-	[illegible]	-
....MICRACTINIUM	200	1	--	-	*	0	[illegible]	-
...OOCYSTACEAE								
....ANKISTRODESMUS	400	2	380	3	*	0	[illegible]	6
....CHLORELLA	200	1	190	1	--	-	--	-
....CHODATELLA	100	1	130	1	*	0	13	3
....DICTYOSPHAERIUM	--	-	--	-	*	0	--	-
....KIRCHNERIELLA	--	-	--	-	*	0	--	-
....OOCYSTIS	400	2	--	-	*	0	--	-
....SELENASTRUM	--	-	1300	9	--	-	13	3
....TETRAEDRON	100	1	*	0	*	0	13	3
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	*	0	--	-
....CRUCIGENIA	--	-	1000	7	--	-	--	-
....SCENEDESMUS	2600	13	2200#	16	2400	1	180#	39
....TETRASTRUM	400	2	--	-	--	-	51	11
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	400	2	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	700	4	--	-	*	0	13	3
....CHLOROGONIUM	--	-	--	-	--	-	13	3

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	3200#	16	950	7	*	0	39	8
....MELOSIRA	6000#	30	190	1	*	0	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	13	3
....CYMBELLA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	4300#	22	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	--	-	--	-	13	3
...NITZSCHIACEAE								
....NITZSCHIA	200	1	570	4	*	0	64	14
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...CHROMULINACEAE								
....CHRYSOCOCCUS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	100	1	130	1	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE	JUN 18,80		JUL 21,80		AUG 5,80		SEP 9,80	
TIME	1045		1100		1015		1100	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	400	2	5000#	37	3500	2	--	-
....GOMPHOSPHAERIA	--	-	--	-	210000#	92	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	1500	11	6000	3	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	--	-	1500	1	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	100	1	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	13	3
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404302 LAWRENCE BROOK AT DAVIDSONS MILL ROAD NEAR PATRICKS CORNER, NJ

LOCATION.--Lat 40°24'58", long 74°29'38", Middlesex County, Hydrologic Unit 02030105, at bridge on Davidsons Mill Road, 1,000 ft (304 m) upstream of Oakeys Brook, 1.0 mi (1.6 km) southwest of Patricks Corner, 1.5 mi (2.5 km) west of Paulas Corners, and 2.3 mi (3.8 km) south of Adams.

DRAINAGE AREA.--12.4 mi^2 (32.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1350	30	68	5.8	18.0	8.6	2.0	540	540	16
JAN 17...	0925	15	99	6.1	3.5	7.5	1.8	5	49	23
APR 02...	1315	52	80	6.1	10.0	11.8	1.1	23	79	15
JUN 04...	1300	15	110	6.9	23.0	8.5	1.4	50	170	27
JUL 17...	1030	E2.4	167	7.0	25.0	4.4	1.8	40	110	32
AUG 28...	1345	--	232	7.1	25.5	6.2	8.2	790	230	35

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 03...	3.6	1.6	4.9	1.5	6	0	5	15	4.5	.1
JAN 17...	4.8	2.7	7.9	1.4	7	0	6	17	9.8	.1
APR 02...	3.4	1.5	7.2	1.2	5	0	4	14	9.6	.1
JUN 04...	5.6	3.1	7.2	1.4	16	0	13	15	10	.1
JUL 17...	6.5	3.9	16	1.9	27	0	22	28	12	.1
AUG 28...	7.0	4.3	30	2.6	39	0	32	49	13	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	8.5	62	<1.0	.400	.44	.84	--	.14	15
JAN 17...	9.6	62	1.1	.090	.24	.33	1.4	.06	4.0
APR 02...	5.6	36	.70	.030	.41	.44	1.1	.44	6.2
JUN 04...	4.1	66	.13	.120	.61	.73	.86	<.03	7.0
JUL 17...	.6	93	1.1	.160	.61	.77	1.9	.31	4.0
AUG 28...	2.0	131	.40	.130	1.8	1.9	2.3	.43	10

01405000 LAWRENCE BROOK AT FARRINGTON DAM, NJ

LOCATION.--Lat 40°27'00", long 74°27'05", Middlesex County, Hydrologic Unit 02030105, on left bank 300 ft (90 m) upstream from Farrington Dam, 0.7 mi (2.1 km) southwest of Milltown, and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--34.4 mi² (89.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1927 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1959(P).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 25.73 ft (7.843 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Records given herein include flow over dam and through blowoff gates. Gates open Sept. 2-22. Flow regulated by Farrington Reservoir, capacity, 655,250,000 gal (2.48 hm³).

COOPERATION.--Water-stage recorder inspected by and records of gate openings furnished by employees of City of New Brunswick.

AVERAGE DISCHARGE.--53 years, 39.4 ft³/s (1.116 m³/s), 15.56 in/yr (395 mm/yr), adjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,920 ft³/s (139 m³/s) July 21, 1975, gage height, 26.93 ft (8.208 m), from rating curve extended above 1,100 ft³/s (31 m³/s) on basis of weir formula; no flow at times when gates in dam were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2000	514	14.6	25.27	7.702	Apr. 10	0100	*757	21.4	25.38	7.736
Mar. 21	2000	466	13.2	25.21	7.684	Apr. 28	1700	495	14.0	25.22	7.687

Minimum daily discharge, 2.0 ft³/s (0.057 m³/s) many days during January, February, August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	21	26	21	2.0	15	279	85	19	18	15	2.0
2	169	20	24	21	2.0	14	173	70	19	14	13	10
3	81	47	21	20	2.0	14	73	60	30	13	15	15
4	63	54	21	19	2.0	14	163	53	34	13	13	15
5	53	40	20	21	2.0	15	123	51	8.4	12	14	14
6	46	28	26	19	2.0	16	59	48	11	14	17	14
7	43	22	48	19	2.0	16	37	48	15	13	13	11
8	34	20	40	19	2.0	24	55	66	16	12	10	25
9	35	19	30	19	2.0	60	255	60	15	11	8.1	31
10	168	29	24	18	2.0	50	384	52	21	10	6.5	31
11	124	41	21	34	2.0	99	108	48	17	10	5.6	31
12	65	94	21	142	2.0	60	76	60	16	4.0	5.2	30
13	57	68	40	63	2.0	45	67	169	15	3.1	4.7	30
14	47	64	58	47	2.0	55	68	92	14	2.9	4.2	30
15	39	53	45	44	2.0	62	87	64	14	2.6	4.5	12
16	31	48	40	38	2.0	70	67	55	13	3.3	6.6	3.3
17	25	40	38	30	2.0	76	57	46	13	4.8	6.4	3.3
18	24	36	26	30	2.0	138	55	46	12	5.7	6.0	3.3
19	21	32	23	73	2.0	78	54	46	12	6.1	5.7	3.3
20	21	28	22	53	2.0	56	51	43	12	6.6	5.2	3.3
21	21	24	21	42	2.0	180	51	59	11	7.2	4.8	3.3
22	21	25	24	37	2.0	259	48	54	11	11	4.3	3.1
23	20	25	37	42	2.7	123	47	45	11	43	4.2	3.0
24	20	24	45	29	5.2	73	46	40	11	27	4.0	3.0
25	21	21	71	5.3	13	214	46	37	11	16	3.5	3.0
26	21	67	62	2.0	17	100	46	31	10	11	3.3	3.0
27	21	75	46	2.0	18	65	52	20	12	8.9	2.8	3.0
28	28	51	39	2.0	17	50	246	19	15	6.8	2.2	3.0
29	35	42	34	2.0	16	50	225	19	14	56	2.0	3.0
30	27	34	25	2.0	---	108	109	19	43	53	2.0	3.0
31	24	---	23	2.0	---	162	---	18	---	20	2.0	---
TOTAL	1673	1192	1041	917.3	132.9	2361	3207	1623	475.4	439.0	213.8	347.9
MEAN	54.0	39.7	33.6	29.6	4.58	76.2	107	52.4	15.8	14.2	6.90	11.6
MAX	268	94	71	142	18	259	384	169	43	56	17	31
MIN	20	19	20	2.0	2.0	14	37	18	8.4	2.6	2.0	2.0
(†)	-1.8	0	0	-3.8	+3.7	+1.9	-1.2	-.6	0	-.2	-1.7	-9.7
MEAN‡	52.3	39.7	33.6	25.8	8.3	78.1	106	51.8	15.8	14.0	5.2	1.9
CFSM‡	1.52	1.15	.98	.75	.24	2.27	3.08	1.51	.46	.41	.15	.06
IN‡	1.75	1.29	1.13	.86	.26	2.61	3.42	1.73	.51	.47	.17	.06

CAL YR 1979 TOTAL 22153.0 MEAN 60.7 MAX 1160 MIN 11 MEAN‡ 60.8 CFSM‡ 1.77 IN‡ 23.98
WTR YR 1980 TOTAL 13623.3 MEAN 37.2 MAX 384 MIN 2.0 MEAN‡ 36.1 CFSM‡ 1.05 IN‡ 14.30

† Change in contents, in cubic feet per second, in Farrington Reservoir.
‡ Adjusted for change in contents.

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ

LOCATION.--Lat 40°28'59", long 74°24'45", Middlesex County, Hydrologic Unit 02030105, at bridge on Burnet Street in Westons Mills, 200 ft (61 m) downstream from outflow of Westons Mill Pond, and 0.5 mi (0.8 km) northwest of Interchange 9 of the New Jersey Turnpike.

DRAINAGE AREA.--42.0 mi² (108.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT										
04...	1300	94	6.7	19.0	8.6	1.0	490	33	24	5.8
FEB										
21...	1000	210	7.2	4.0	13.0	1.0	8	50	42	10
MAR										
27...	0930	148	6.5	7.0	12.4	1.1	70	540	30	7.2
MAY										
29...	0945	142	7.3	20.0	8.8	1.5	20	70	33	7.8
JUL										
14...	1215	150	7.3	26.5	7.1	2.8	170	110	37	8.9
AUG										
19...	1245	147	7.1	25.0	7.3	2.6	20	20	--	--

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
04...	2.2	7.6	2.3	12	0	10	14	9.7	.1
FEB									
21...	4.2	19	2.2	18	0	15	25	33	.1
MAR									
27...	2.8	14	1.9	13	0	11	19	19	.1
MAY									
29...	3.4	12	1.7	18	0	15	19	18	.1
JUL									
14...	3.6	12	2.4	24	0	20	18	18	.1
AUG									
19...	--	--	--	29	0	24	--	--	--

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
04...	5.7	66	<1.0	.200	.49	.69	--	.31	6.4
FEB									
21...	4.8	118	1.2	.110	.16	.27	1.5	.08	--
MAR									
27...	6.5	92	.85	.150	.21	.36	1.2	.02	6.1
MAY									
29...	2.9	87	.89	.100	.39	.49	1.4	.10	4.5
JUL									
14...	1.5	93	.35	.210	.56	.77	1.1	.28	7.3
AUG									
19...	--	--	<.05	.040	.53	.57	--	.15	3.1

01405240 MATCHAPONIX BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°19'21", long 74°21'35", Monmouth County, Hydrologic Unit 02030105, at bridge on Union Hill Road, 1.9 mi (3.1 km) north of Englishtown, 2.4 mi (3.8 km) southwest of Redshaw Corner, 2.8 mi (4.6 km) northwest of Gordons Corner, and 3.9 mi (6.3 km) upstream of Barclay Brook.

DRAINAGE AREA.--29.1 mi^2 (75.4 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	0915	48	203	--	17.0	8.0	2.0	23	540	43
JAN 31...	0900	26	265	7.2	.0	12.6	2.0	<20	<2	50
MAR 24...	0910	69	190	6.5	5.0	11.4	.4	<20	22	41
MAY 22...	0930	55	177	6.5	15.0	9.5	2.0	460	540	40
JUL 09...	0915	18	270	6.8	19.5	7.0	4.4	20	350	49
AUG 11...	0930	17	174	6.8	24.0	6.4	5.1	50	70	51
SEP 16...	0940	22	310	7.1	18.0	7.0	4.3	170	22	57

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 03...	12	3.1	10	3.9	5	.0	34	15	.2
JAN 31...	14	3.7	18	3.8	31	--	42	21	.2
MAR 24...	11	3.2	13	2.8	2	--	38	16	.2
MAY 22...	11	3.1	13	2.3	8	--	29	18	.2
JUL 09...	14	3.3	19	4.6	21	--	35	23	.2
AUG 11...	15	3.2	20	4.7	47	--	45	25	.2
SEP 16...	17	3.5	22	6.7	3	.0	40	29	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	11	121	1.1	1.600	1.1	2.7	3.8	.59	5.8
JAN 31...	13	133	1.8	--	--	3.7	5.5	.93	6.4
MAR 24...	9.3	127	1.2	.900	1.5	2.4	3.6	1.0	2.9
MAY 22...	8.8	115	.90	.610	.69	1.3	2.2	1.0	2.6
JUL 09...	11	138	1.5	3.900	2.1	6.0	7.5	1.6	--
AUG 11...	12	150	.40	3.800	2.5	6.3	6.7	.43	4.4
SEP 16...	13	162	1.4	4.900	.50	5.4	6.8	2.0	5.9

01405240 MATCHAPONIX BROOK NEAR ENGLISHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 03...	0915	50	1	10	40	0	20	58
SEP 16...	0940	20	1	0	120	0	10	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 03...	3300	3	170	<.5	7	0	40	0
SEP 16...	2400	9	160	<.5	40	0	30	--

01405285 BARCLAY BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°20'53", long 74°21'27", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-Englishtown Road, 0.6 mi (1.0 km) southwest of Redshaw Corner, 0.8 mi (1.3 km) upstream of mouth, 2.3 mi (3.6 km) southwest of Moerls Corner, and 3.5 mi (5.6 km) north of Englishtown.

DRAINAGE AREA.--4.94 mi^2 (12.79 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1045	16	173	--	16.5	7.0	1.0	170	240	19
JAN 31...	1030	--	278	4.2	.0	15.2	1.0	<20	<2	28
MAR 24...	1030	24	187	3.9	4.0	12.5	.3	<20	23	20
MAY 22...	1030	17	179	3.5	13.5	9.3	.6	20	130	18
JUL 09...	1000	1.0	375	3.2	19.0	7.1	1.4	<20	79	33
AUG 11...	1100	1.0	374	3.5	24.0	7.2	<.4	<20	140	36
SEP 16...	1050	1.0	380	3.4	17.0	6.4	3.8	140	79	42

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 03...	4.6	2.2	3.9	1.8	0	.0	36	8.6	.1
JAN 31...	6.2	3.0	5.3	1.6	0	--	54	9.5	.1
MAR 24...	4.6	2.0	4.0	1.5	0	--	39	6.0	.1
MAY 22...	4.2	1.8	4.0	1.3	0	--	37	5.4	.1
JUL 09...	7.9	3.2	4.7	2.6	0	--	69	8.1	.1
AUG 11...	8.1	3.8	4.7	2.4	0	--	81	8.5	.1
SEP 16...	10	4.2	5.5	5.7	0	.4	71	11	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	9.3	74	<1.0	.500	.19	.69	--	.08	4.7
JAN 31...	12	101	.17	.540	.00	.54	.71	--	6.5
MAR 24...	6.8	76	.20	.300	1.8	2.1	2.3	.11	5.4
MAY 22...	7.0	78	.10	.300	.62	.92	1.0	.04	--
JUL 09...	12	129	.08	.990	.41	1.4	1.5	.12	5.0
AUG 11...	16	143	<.05	.990	.51	1.5	--	.06	2.9
SEP 16...	15	132	.18	1.200	5.4	6.6	6.8	.09	3.1

01405285 BARCLAY BROOK NEAR ENGLISHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
OCT 03...	1045	6400	.3	49	1400	1	0	10	40	0	<10
SEP 16...	1050	--	--	--	1700	0	--	10	50	0	--

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 03...	10	10	<10	9	20	4200	37000	7	70	160
SEP 16...	10	--	--	5	--	3000	--	4	--	500

DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 03...	20	<.5	.00	8	<10	0	0	50	40	1
SEP 16...	--	.1	--	16	--	0	--	120	--	--

DATE	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 03...	6	.0	3	.0	.0	.0	.0	.1	.0	.0
SEP 16...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 03...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
SEP 16...	--	--	--	--	--	--	--	--	--	--

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°22'55", Middlesex County, Hydrologic Unit 02030105, at bridge on Mundy Avenue in Spottswood, 0.2 mi (0.3 km) upstream from mouth, 0.5 mi (0.8 km) east of De Voe Lake dam, and 3.4 mi (5.5 km) southeast of Tanners Corners.

DRAINAGE AREA.--44.1 mi² (114.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1230	101	155	--	17.0	7.3	1.0	2200	540	34
MAR 13...	1200	66	155	6.5	2.0	12.0	E2.0	<20	8	36
APR 17...	1030	90	154	6.3	7.0	9.8	<1.1	<20	<2	38
MAY 22...	1045	99	149	6.4	15.0	7.8	3.8	700	1600	35
JUL 09...	1100	E23	215	6.9	21.0	4.7	3.5	80	920	43
AUG 11...	1100	E17	240	4.8	24.0	4.8	E2.0	20	540	49
SEP 16...	1030	--	260	7.5	19.0	5.2	3.6	230	350	59

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 03...	9.0	2.7	7.1	3.3	4	.0	30	13	.1
MAR 13...	9.3	3.2	10	2.2	2	--	37	15	.1
APR 17...	10	3.2	8.5	2.5	4	--	35	12	.1
MAY 22...	9.2	3.0	9.7	2.3	2	.1	33	16	.1
JUL 09...	12	3.1	17	4.1	3	--	36	22	.2
AUG 11...	14	3.4	17	4.3	2	--	43	21	.2
SEP 16...	17	4.0	20	5.2	2	--	54	26	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 03...	9.7	100	<1.0	.800	1.0	1.8	--	.21	4.8
MAR 13...	8.9	96	.86	1.230	1.3	2.5	3.4	.20	2.0
APR 17...	8.5	89	.92	.660	.25	.91	1.8	.21	2.9
MAY 22...	8.2	108	.75	.530	.87	1.4	2.2	1.0	2.5
JUL 09...	10	130	3.5	.470	1.1	1.6	5.1	.29	3.3
AUG 11...	12	145	3.5	.400	.80	1.2	4.7	.21	3.2
SEP 16...	12	171	3.1	.710	.24	.95	4.0	.28	4.6

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
03...	1230	70	1	10	40	0	20	3
MAY								
22...	1045	20	1	0	90	0	20	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
03...	3400	4	150	<.5	6	0	30	1
MAY								
22...	4400	10	170	<.1	6	0	20	0

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi (4.2 km) north of Manalapan, 3.1 mi (5.0 km) southwest of Matchaponix, 3.3 mi (5.3 km) downstream of Still House Brook, and 4.1 mi (6.7 km) northeast of Applegarth.

DRAINAGE AREA.--20.9 mi^2 (54.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 04...	1330	--	132	--	17.0	8.7	3.0	490	130	33
JAN 31...	1220	33	140	6.4	.0	15.5	<1.0	<20	<2	37
MAR 24...	1140	52	120	5.7	6.0	12.4	.3	20	540	30
MAY 22...	1110	37	108	6.3	16.0	8.5	1.0	230	180	30
JUL 09...	1040	14	118	6.7	20.0	8.7	1.4	330	>2400	33
AUG 11...	1215	12	108	7.4	24.0	9.1	E2.5	40	540	31
SEP 16...	1200	14	114	6.8	18.0	9.0	<.8	5400	1600	31

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 04...	7.7	3.4	4.9	3.2	6	.0	21	10	.2
JAN 31...	8.1	4.0	4.9	2.2	4	--	24	10	.2
MAR 24...	6.8	3.1	4.5	2.2	2	--	25	8.5	.2
MAY 22...	6.5	3.3	5.1	1.9	12	--	20	9.0	.2
JUL 09...	7.4	3.6	4.5	2.5	8	--	19	10	.2
AUG 11...	6.5	3.5	4.7	2.5	12	--	18	10	.3
SEP 16...	6.3	3.8	5.1	2.6	17	--	16	12	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	12	76	<1.0	.300	.00	.30	--	.20	2.9
JAN 31...	11	79	1.9	.180	.09	.27	2.2	.15	3.0
MAR 24...	8.7	--	1.4	.260	--	--	--	.15	2.9
MAY 22...	7.4	81	1.1	.120	.72	.84	1.9	1.1	3.9
JUL 09...	7.9	71	.68	.320	.14	.46	1.1	.20	5.6
AUG 11...	11	72	.46	.270	.26	.53	.99	.31	4.2
SEP 16...	11	77	.29	.170	1.7	1.9	2.2	.21	3.3

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 04...	1330	--	--	--	50	1	--	0	0	0	--
SEP 16...	1200	1600	.4	6.0	--	--	1	--	--	--	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 04...	<10	--	--	3	--	2500	--	6	--	80	--
SEP 16...	--	20	20	--	10	--	7000	--	20	--	330

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	<.5	--	6	--	0	--	20	--	3	--	--
SEP 16...	--	.00	--	<10	--	0	--	70	--	7	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	.0	2	7.3	2.8	2.5	.0	.2	.0	1.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°23'27", Middlesex County, Hydrologic Unit 02030105, on right bank of De Voe Lake Dam in Spotswood, 0.1 mi (0.2 km) upstream from Cedar Brook, and 0.6 mi (1.0 km) upstream from confluence with Matchaponix Brook.

DRAINAGE AREA.--40.7 mi^2 (105.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1957 to current year.

REVISED RECORDS.--WSP 1722: 1957-60.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Duhernal Water System). January 1957 to September 1966 at datum 17.72 ft (5.401 m) higher.

REMARKS.--Water-discharge records good except those for periods when the waste gates were open, which are fair. Discharge given herein include flow over dam and through waste gates. Waste gates open Mar. 31-Apr. 1, Apr. 10-12, Apr. 23-May 1, July 23-24. Some regulation by Lake Manalapan, Helmetta Pond, and De Voe Lake.

AVERAGE DISCHARGE.--23 years, 66.9 ft^3/s (1.895 m^3/s), 22.32 in/yr (567 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s (46.7 m^3/s) May 30, 1968, elevation, 19.90 ft (6.066 m), waste gates open; no flow part or all of some days in many years when gates were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 712 ft^3/s (20.2 m^3/s) Apr. 11, elevation, 19.00 ft (5.791 m) waste gates open; no flow parts of July 24, 25 after waste gates were closed and water level was below dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	39	54	48	36	34	236	107	47	29	50	18
2	160	39	51	47	36	36	266	102	44	26	38	14
3	117	75	48	47	36	35	161	84	47	25	35	14
4	81	122	47	44	36	36	166	73	51	30	28	14
5	68	86	47	44	36	38	209	66	46	30	27	14
6	95	60	48	44	36	44	143	62	39	30	27	17
7	86	52	69	43	36	43	121	61	36	28	25	17
8	61	48	68	49	38	48	111	81	39	26	24	15
9	55	46	55	47	39	65	149	89	38	26	22	13
10	158	45	49	43	39	59	405	70	46	24	20	12
11	269	51	47	52	38	106	536	62	45	23	18	11
12	171	106	47	178	39	95	181	69	40	23	34	11
13	110	117	56	173	38	62	129	155	35	22	34	11
14	86	83	92	89	38	99	119	148	33	21	27	13
15	67	70	69	72	39	165	125	94	31	20	26	23
16	58	58	56	64	46	131	113	69	31	19	24	24
17	53	53	55	57	56	98	101	60	33	26	22	20
18	51	50	50	57	46	119	80	60	29	37	21	33
19	48	48	47	110	43	114	71	67	28	28	21	31
20	48	47	47	112	41	71	65	63	28	23	23	25
21	47	45	47	75	41	109	63	75	27	22	23	21
22	46	44	48	63	50	210	63	93	26	41	23	19
23	42	44	58	71	74	184	72	71	25	113	23	17
24	44	44	69	65	72	112	65	57	24	28	20	13
25	42	43	96	54	63	169	66	53	25	24	19	15
26	40	78	110	50	54	182	66	48	24	25	18	23
27	39	179	75	48	48	67	94	42	25	22	17	21
28	40	130	60	47	43	118	131	40	25	21	17	19
29	44	75	55	47	39	133	180	39	24	42	17	18
30	42	61	52	43	---	193	114	38	33	127	18	17
31	40	---	50	40	---	230	---	39	---	97	19	---
TOTAL	2423	2038	1822	2023	1276	3205	4401	2237	1024	1078	760	533
MEAN	78.2	67.9	58.8	65.3	44.0	103	147	72.2	34.1	34.8	24.5	17.8
MAX	269	179	110	178	74	230	536	155	51	127	50	33
MIN	39	39	47	40	36	34	63	38	24	19	17	11
CFSM	1.92	1.67	1.45	1.60	1.08	2.53	3.61	1.77	.84	.86	.60	.44
IN.	2.21	1.86	1.67	1.85	1.17	2.93	4.02	2.04	.94	.99	.69	.49

CAL YR 1979 TOTAL 32120 MEAN 88.0 MAX 1100 MIN 27 CFSM 2.16 IN 29.36
WTR YR 1980 TOTAL 22820 MEAN 62.3 MAX 536 MIN 11 CFSM 1.53 IN 20.86

01405440 MANALAPAN BROOK AT BRIDGE STREET AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'26", long 74°23'26", Middlesex County, Hydrologic Unit 02030105, at bridge on Bridge Street in Spotswood, 150 ft (46 m) downstream from Cedar Brook, and 400 ft (120 m) below DeVoe Lake Dam.

DRAINAGE AREA.--43.9 mi² (113.7 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1979 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT									
03...	1345	107	--	17.0	8.1	2.0	1300	>2400	26
FEB									
07...	0930	138	5.9	2.0	12.5	--	80	110	29
APR									
17...	0900	112	5.6	8.0	10.4	<.7	70	49	23
MAY									
22...	0915	104	6.1	16.0	8.1	1.2	70	14	26
JUL									
09...	0930	108	6.7	20.0	7.7	1.6	490	240	27
AUG									
11...	1140	110	5.3	23.0	7.1	3.0	1100	350	24
SEP									
16...	0915	93	6.7	18.0	7.7	<.7	1100	540	23

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
03...	5.7	2.8	4.2	3.1	6	.0	23	10	.1
FEB									
07...	6.0	3.3	7.1	1.9	5	--	24	11	.1
APR									
17...	4.6	2.9	4.6	2.0	2	--	23	8.9	.1
MAY									
22...	5.5	2.9	5.7	1.7	3	.1	22	10	.1
JUL									
09...	5.4	3.2	6.1	2.1	7	--	18	11	.1
AUG									
11...	4.6	3.1	6.5	2.7	9	--	19	11	.1
SEP									
16...	4.2	3.1	7.5	2.6	3	.1	18	11	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	7.7	72	<1.0	.300	.60	.90	--	.36	4.8
FEB									
07...	8.3	75	--	.410	.04	.45	--	<.01	7.8
APR									
17...	7.2	66	1.1	.190	.34	.53	1.6	1.5	5.8
MAY									
22...	6.0	80	.75	.220	.38	.60	1.4	.31	2.8
JUL									
09...	5.5	71	.84	.310	.43	.74	1.6	.25	10
AUG									
11...	7.0	71	.79	.300	.58	.88	1.7	.34	4.1
SEP									
16...	5.5	77	1.2	.300	2.4	2.7	3.9	.28	2.9

01405440 MANALAPAN BROOK AT BRIDGE STREET AT SPOTSWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 03...	1345	120	1	10	30	0	20	4
MAY 22...	0915	50	1	0	60	0	10	3
SEP 16...	0915	30	1	10	50	0	10	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 03...	3500	8	70	<.5	4	0	20	0
MAY 22...	2200	7	70	<.5	4	0	10	2
SEP 16...	1600	7	50	<.5	5	0	40	0

01405500 SOUTH RIVER AT OLD BRIDGE, NJ

LOCATION.--Lat 40°24'22", long 74°22'08", Middlesex County, Hydrologic Unit 02030105, on right abutment of Duhernal Dam, 0.6 mi (1.0 km) south of Old Bridge, 2.3 mi (3.7 km) upstream from Deep Run, and 9.1 mi (14.6 km) upstream from mouth.

DRAINAGE AREA.--94.6 mi^2 (245.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WSP 1902: 1957.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. The flow past this station is affected by pumpage from well fields for industrial use by Duhernal Water System. Some regulation by Duhernal Lake, capacity, 138,000,000 gal (522,300 m^3), Lake Manalapan, De Voe Lake, and several small ponds in headwater tributaries.

AVERAGE DISCHARGE.--41 years, 142 ft^3/s (4.021 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft^3/s (120 m^3/s) Sept. 15, 1944, elevation, 11.71 ft (3.569 m), waste gates open; maximum gage height, 11.73 ft (3.575 m) Aug. 28, 1971; no flow on days when waste gates were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft^3/s (57.8 m^3/s) Apr. 10, elevation, 11.05 ft (3.368 m); minimum daily, 19 ft^3/s (0.54 m^3/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	95	145	103	63	69	825	276	102	61	127	28
2	425	95	134	98	60	63	836	248	91	49	80	25
3	282	203	124	95	57	63	418	204	103	44	71	23
4	215	340	113	89	57	65	397	181	128	60	58	22
5	176	217	113	87	56	72	533	164	103	58	50	22
6	294	167	114	88	57	83	318	153	75	57	47	22
7	235	147	173	84	57	87	252	145	66	55	44	22
8	165	134	166	96	59	102	228	200	70	45	40	21
9	144	125	134	94	61	166	354	230	72	40	36	20
10	405	122	117	83	61	153	1530	176	93	37	33	20
11	763	142	112	97	60	281	1230	155	98	35	31	20
12	436	315	106	395	59	234	397	164	77	34	62	19
13	290	306	127	351	58	161	284	379	64	32	110	19
14	228	221	219	179	58	266	261	397	59	30	59	20
15	184	193	161	157	58	430	338	241	55	29	51	28
16	165	164	135	140	75	327	275	176	53	28	46	38
17	151	149	136	126	119	244	232	152	52	31	37	33
18	143	139	122	123	89	314	202	142	50	49	34	56
19	133	130	104	251	73	279	186	166	47	42	32	76
20	126	125	102	226	66	189	175	152	48	34	33	49
21	120	120	105	157	68	286	173	177	46	31	33	37
22	116	116	110	139	87	785	168	234	44	59	33	32
23	110	113	140	155	155	820	156	173	42	255	33	28
24	109	111	161	140	148	373	114	138	40	115	30	26
25	103	110	204	116	128	620	107	121	39	51	29	26
26	98	193	239	103	112	793	107	103	39	44	28	41
27	95	487	165	94	95	323	148	89	39	38	26	44
28	97	316	140	89	81	247	383	79	48	35	25	35
29	111	200	127	87	76	321	770	74	46	108	24	30
30	108	164	119	77	---	598	445	71	60	388	24	30
31	99	---	111	68	---	574	---	72	---	305	24	---
TOTAL	6395	5459	4278	4187	2253	9388	11842	5432	1949	2279	1390	912
MEAN	206	182	138	135	77.7	303	395	175	65.0	73.5	44.8	30.4
MAX	763	487	239	395	155	820	1530	397	128	388	127	76
MIN	95	95	102	68	56	63	107	71	39	28	24	19

CAL YR 1979 TOTAL 80440 MEAN 220 MAX 2900 MIN 31
WTR YR 1980 TOTAL 55764 MEAN 152 MAX 1530 MIN 19

01405700 SOUTH RIVER BELOW DUHERNAL DAM AT OLD BRIDGE, NJ

LOCATION.--Lat 40°25'00", long 74°21'43", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-South Amboy Road in Old Bridge, 0.5 mi (0.8 km) upstream of Deep Run, and 7.4 mi (11.9 km) upstream from mouth.

DRAINAGE AREA.--95.9 mi^2 (248.4 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976-77, January 1979 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 04...	1120	113	6.1	18.5	8.2	.1	90	790	29	7.3
FEB 21...	1230	368	6.3	2.5	11.2	.5	4	4	50	9.5
MAR 27...	1230	116	5.6	7.0	11.7	4.4	5	540	27	6.7
MAY 29...	1130	157	6.7	20.0	7.8	1.5	130	1300	33	7.6
JUL 14...	0930	1700	7.0	26.0	8.0	4.7	330	170	160	17
AUG 19...	1045	301	6.4	22.5	5.9	1.5	130	330	49	10

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 04...	2.7	6.8	3.1	7	0	6	24	11	.1
FEB 21...	6.5	38	3.6	7	0	6	36	74	.1
MAR 27...	2.5	7.1	2.8	4	0	3	25	9.6	.1
MAY 29...	3.4	13	2.2	10	0	8	26	18	.2
JUL 14...	29	280	13	20	0	16	83	450	.2
AUG 19...	5.9	34	4.1	12	0	10	31	57	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	7.3	71	<1.0	.400	.00	.40	--	.32	4.3
FEB 21...	7.7	190	1.4	.770	.23	1.1	2.4	.08	--
MAR 27...	6.3	70	.94	.400	1.0	1.4	2.3	.07	5.5
MAY 29...	7.0	95	1.4	.220	.98	1.2	2.6	.10	4.1
JUL 14...	2.6	1020	1.3	.120	1.2	1.3	2.6	.80	9.6
AUG 19...	5.5	183	1.8	.090	.59	.68	2.5	.31	1.8

RESERVOIR IN RARITAN RIVER BASIN

01396790 SPRUCE RUN RESERVOIR.--Lat 40°38'30", long 74°55'19", Hunterdon County, Hydrologic Unit 02030105, at dam on Spruce Run, 0.5 mi (0.8 km) north of Clinton, and 0.6 mi (1.0 km) upstream from mouth. DRAINAGE AREA, 41.3 mi^2 (107.0 km^2). PERIOD OF RECORD, November 1963 to current year. Nonrecording gage read daily. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with concrete spillway; dam completed in October 1963 with crest of spillway at elevation 273.00 ft (83.210 m). Usable capacity, 11,000,000,000 gal (41.635 hm^3). Dead storage 300,000 gal (1,136 m^3). Reservoir used for water supply and recreation. Outflow mostly regulated by gates. Water is released to maintain minimum flow on the South Branch Raritan River and, at times, for municipal supply. Records given herein represent usable capacity. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 11,400,000,000 gal (43.15 hm^3) Jan. 24, 1979, elevation, 274.72 ft (83.735 m); minimum observed, 6,700,000,000 gal (25.36 hm^3) Sept. 30, 1980, elevation, 261.21 ft (79.617 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 11,200,000,000 gal (42.39 hm^3) Oct. 6, elevation, 273.40 ft (83.332 m); minimum observed, 6,700,000,000 gal (25.36 hm^3) Sept. 30, elevation, 261.21 ft (79.617 m).

01397050 ROUND VALLEY RESERVOIR.--Lat 40°36'39", long 74°50'42", Hunterdon County, Hydrologic Unit 02030105, at main dam on Prescott Brook, 1.8 mi (2.9 km) south of Lebanon, 3.2 mi (5.1 km) upstream from mouth, and 4.5 mi (7.2 km) west of Whitehouse. DRAINAGE AREA, 5.7 mi^2 (14.8 km^2). PERIOD OF RECORD, March 1966 to current year. Nonrecording gage read daily. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam at main dam on Prescott Brook and two dams on South Branch Rockaway River at Lebanon; storage began in March 1966. Capacity at spillway level, 55,000,000,000 gal (208.175 hm^3), elevation, 385.00 ft (117.348 m). Reservoir is used primarily for storage and is filled by pumping from South Branch Raritan River at Hamden Pumping Station (see following page). Outflow is controlled by operation of gates in pipe in dams. Water is released into South Branch Rockaway Creek and Prescott Brook. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 55,400,000,000 gal (209.69 hm^3) June 15, 1975, elevation, 385.63 ft (117.540 m); minimum observed (after first filling), 45,400,000,000 gal (171.84 hm^3) Sept. 30, 1980, elevation, 372.35 ft (113.492 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 53,800,000,000 gal (203.63 hm^3) Oct. 10, elevation, 383.63 ft (116.930 m); minimum observed, 45,400,000,000 gal (171.84 hm^3) Sept. 30, elevation, 372.35 ft (113.492 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01396790	SPRUCE RUN RESERVOIR		013970500	ROUND VALLEY RESERVOIR	
Sept. 30	273.02	11,000	-	383.47	54,500	-
Oct. 31	272.72	10,800	-10.0	383.03	53,400	-54.9
Nov. 30	272.87	10,900	+5.2	382.83	53,200	-10.3
Dec. 31	272.34	10,600	-15.0	382.21	52,700	-25.0
CAL YR 1979	-	-	+0.8	-	-	+2.1
Jan. 31	272.18	10,600	0	381.86	52,400	-15.0
Feb. 29	272.87	10,900	+16.0	381.51	52,100	-16.0
Mar. 31	273.18	11,000	+5.0	382.15	52,600	+25.0
Apr. 30	273.17	11,000	0	382.76	53,100	+25.8
May 31	272.99	11,000	0	383.00	53,400	+15.0
June 30	271.91	10,500	-25.8	382.25	52,700	-36.1
July 31	269.04	9,300	-59.9	380.50	51,600	-54.9
Aug. 31	265.71	8,100	-59.9	376.68	48,900	-134.7
Sept. 30	261.21	6,700	-72.2	372.35	45,400	-180.5
WTR YR 1980	-	-	-18.2	-	-	-38.5

* Elevation at 0800 on first day of following month.

DIVERSIONS IN RARITAN RIVER BASIN

01396920 Water is diverted 4.0 mi (6.4 km) upstream from the gaging station on South Branch Raritan River at Stanton (see sta 01397000), at the Hamden Pumping Station, for storage in Round Valley Reservoir. Records furnished by New Jersey Department of Environmental Protection.

01400490 Johns-Manville Products Corporation diverts water 1,500 ft (457 m) upstream from the gaging station on Raritan River at Manville (see sta 01400500) for cooling purposes and returns the water to the river 0.6 mi (1.0 km) below the station. Records furnished by the Johns-Manville Products Corporation.

01400509 Elizabethtown Water Company diverts water from the Raritan and Millstone Rivers just upstream from the mouth of the Millstone River. Records given herein represent the total diversion from both rivers. Records furnished by the Elizabethtown Water Company.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	HAMDEN PUMPING STATION 01396920	JOHNS-MANVILLE PRODUCTS CORPORATION 01400490	ELIZABETHTOWN WATER COMPANY 01400509
October	0	8.4	143
November	0	7.8	128
December	0	8.0	142
CAL YR 1979	0	7.5	143
January	0	7.6	148
February	0	7.4	126
March	0	6.8	139
April	0	5.6	146
May	0	5.2	154
June	0	4.9	170
July	0	5.0	174
August	0	4.9	178
September	0	5.1	177
WTR YR 1980	0	6.4	152

01407253 WILLOW BROOK NEAR HOLMDEL, NJ

LOCATION.--Lat 40°19'47", long 74°10'26", Monmouth County, Hydrologic Unit 02030104, at bridge on Willow Brook Road, 0.6 mi (1.0 km) upstream of Big Brook, 1.2 mi (1.9 km) southeast of Holmdel, 1.3 mi (2.1 km) northeast of Vanderburg, and 1.6 mi (2.6 km) northwest of Sugar Loaf Hill.

DRAINAGE AREA.--7.52 mi^2 (19.48 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 04...	0930	12	208	--	16.0	9.1	1.0	1300	1600	72
FEB 13...	1100	23	255	7.0	.0	--	--	80	70	82
APR 08...	1030	22	200	7.0	8.5	10.8	1.2	20	49	65
MAY 27...	0930	14	211	7.0	12.5	9.6	1.5	490	350	68
JUL 08...	0945	12	211	7.1	17.0	8.3	.7	1100	1600	76
AUG 05...	0930	7.9	225	7.1	14.0	9.7	.7	230	--	76
SEP 22...	0945	9.7	248	6.9	19.0	8.8	E1.8	490	>2400	81

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	23	3.5	8.5	3.5	36	.0	30	18	.3
FEB 13...	27	3.5	9.8	2.1	31	--	32	21	.3
APR 08...	20	3.7	8.8	2.1	25	--	30	17	.2
MAY 27...	21	3.7	9.3	1.8	27	--	30	17	.3
JUL 08...	24	3.9	10	2.6	33	--	31	19	.3
AUG 05...	24	4.0	10	3.0	46	--	29	20	.4
SEP 22...	26	3.8	9.6	3.1	39	--	32	18	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	11	129	<1.0	.200	.19	.39	--	.32	1.8
FEB 13...	11	134	.96	.200	--	E1.3	--	.27	1.2
APR 08...	9.4	--	1.5	.110	.28	.39	1.9	.65	1.7
MAY 27...	11	130	1.1	.080	2.4	2.5	3.6	.24	18
JUL 08...	12	135	.82	.130	.26	.39	1.2	.17	6.5
AUG 05...	13	157	.73	.110	.59	.70	1.4	.25	2.6
SEP 22...	15	166	.52	.040	.41	.45	.97	.31	5.8

01407253 WILLOW BROOK NEAR HOLMDEL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
04...	0930	500	.0	3.1	30	1	0	0	20	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
04...	10	20	<10	3	<10	1800	25000	5	10	110

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
04...	170	<.5	.00	5	10	0	0	0	40	2

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	25	.0	3	4.3	.9	4.1	.0	2.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	.0	.5	.0	.0	.0	.0	.0	.0	0	.0

01407400 YELLOW BROOK AT COLTS NECK, NJ

LOCATION.--Lat 40°17'47", long 74°10'16", Monmouth County, Hydrologic Unit 02030104, at bridge on Creamery Road in Colts Neck, and 0.3 mi (0.5 km) upstream from Mine Brook.

DRAINAGE AREA.--9.71 mi² (25.15 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 04...	1115	126	--	15.5	9.2	1.0	1100	>2400	38
FEB 13...	1000	107	6.5	.0	--	--	<20	<2	27
APR 08...	1230	132	7.0	12.0	11.0	.6	20	33	38
MAY 27...	1030	131	6.9	14.0	9.3	1.4	490	350	38
JUL 08...	1045	131	7.0	18.0	8.0	.7	790	920	42
AUG 05...	1030	130	7.0	15.0	8.3	1.6	3500	3500	42
SEP 22...	1045	142	6.7	20.0	8.1	E1.8	330	920	41

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	10	3.2	5.9	1.9	13	.0	12	13	.2
FEB 13...	7.0	2.4	4.4	1.6	9	--	12	11	.2
APR 08...	10	3.2	6.1	1.5	21	--	20	12	.1
MAY 27...	9.9	3.3	6.0	1.3	15	--	13	13	.2
JUL 08...	11	3.5	7.8	1.6	24	--	9.7	14	.3
AUG 05...	11	3.5	6.8	2.0	19	--	10	14	.3
SEP 22...	11	3.3	6.1	2.0	21	--	9.0	12	.3

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	13	81	1.0	.200	.01	.21	1.2	.19	3.1
FEB 13...	11	56	1.1	.100	--	E.57	--	.11	2.9
APR 08...	12	--	1.8	.140	--	--	--	.71	1.7
MAY 27...	13	92	1.4	.87	.00	.87	2.3	.26	2.9
JUL 08...	13	92	1.3	.190	.36	.55	1.8	.05	.5
AUG 05...	14	94	1.0	.200	.50	.70	1.7	.43	3.2
SEP 22...	16	89	.77	.140	.64	.78	1.6	.12	5.7

01407400 YELLOW BROOK AT COLTS NECK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
04...	1115	400	.2	3.3	20	1	0	0	0	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
04...	10	20	<10	2	<10	2800	24000	4	20	60

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
04...	110	<.5	.00	4	20	0	0	20	30	1

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	5	.0	15	.0	.4	1.3	.0	.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
04...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01407500 SWIMMING RIVER NEAR RED BANK, NJ

LOCATION.--Lat 40°19'10", long 74°06'55", Monmouth County, Hydrologic Unit 02030104, on left bank, 50 ft (15 m) upstream from dam at Swimming River Reservoir, 3.3 mi (5.3 km) southwest of Red Bank, and 4.8 mi (7.7 km) upstream from mouth. Water-quality samples collected at bridge on Swimming River Road, 800 ft (244 m) downstream from gaging station.

DRAINAGE AREA.--48.5 mi^2 (125.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1922 to current year.

REVISED RECORDS.--WSP 781. Drainage area. WSP 891: 1939.

GAGE.--Water-stage recorder above dam. Datum of gage is 30.00 ft (9.144 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1962, at site 800 ft (240 m) upstream at datum 17.67 ft (5.386 m) lower. Jan. 19 to Mar. 30, 1962, nonrecording gage, 700 ft (210 m) upstream at datum 13.87 ft (4.228 m) lower.

REMARKS.--Water-discharge records poor. No gage-height record Aug. 20 to Sept. 30. Records given herein represent flow over spillway and flow or leakage through blowoff gates (no gate opening during the year). Diversion above station for municipal supply. Flow regulated by Swimming River Reservoir.

COOPERATION.--Water-stage recorder inspected by and record of diversion furnished by Monmouth Consolidated Water Co.

AVERAGE DISCHARGE.--58 years, 81.1 ft^3/s (2.297 m^3/s), 22.70 in/yr (577 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,910 ft^3/s (252 m^3/s) Oct. 27, 1943, gage height, 8.96 ft (2.731 m) site and datum then in use, from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of weir formula; no flow some days in many years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in July 1919 reached a stage of 7.84 ft (site and datum then in use), from floodmark, discharge about 11,800 ft^3/s (334 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft^3/s (57.8 m^3/s) Apr. 10, gage height, 6.33 ft (1.929 m); no flow many days in summer months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	27	32	31	31	23	485	169	26	.06	30	.00
2	101	27	33	31	30	25	221	124	25	.01	22	.00
3	70	72	31	30	28	24	135	99	34	1.1	18	.00
4	55	59	30	28	30	24	229	81	32	3.4	16	.00
5	50	35	31	33	33	27	197	70	25	3.2	15	.00
6	75	32	31	31	33	27	111	63	21	4.1	31	.00
7	55	31	43	29	35	26	95	63	21	3.1	25	.00
8	40	29	33	32	34	33	87	108	26	2.1	16	.00
9	75	28	28	30	35	51	271	92	22	1.3	9.5	.00
10	200	30	28	28	36	39	1100	65	30	.25	5.1	.00
11	150	43	30	48	34	112	259	57	31	.01	3.1	.00
12	90	119	29	267	35	50	157	76	30	.00	11	.00
13	65	58	51	85	33	38	134	186	24	.00	12	.00
14	53	50	64	58	34	324	144	128	22	.00	8.3	.00
15	47	37	38	54	35	163	241	69	21	.00	5.7	.00
16	43	32	35	44	56	90	134	52	19	.00	4.8	.00
17	39	29	36	42	53	77	102	44	18	.00	2.8	.00
18	37	28	28	46	36	127	89	52	15	.00	1.5	.00
19	34	30	31	125	34	76	86	61	13	.00	.72	.00
20	33	31	33	69	34	56	82	50	10	.00	.08	.00
21	32	31	32	47	35	231	75	81	8.4	.00	.00	.00
22	31	30	33	45	49	466	70	79	5.9	.00	.00	.00
23	30	30	39	60	73	222	67	45	4.2	.00	.00	.00
24	28	28	42	40	55	106	64	34	2.9	.00	.00	.00
25	27	29	98	37	45	477	70	32	1.8	.00	.00	.00
26	26	126	72	40	39	186	72	28	.44	.00	.00	.00
27	25	164	40	37	33	104	84	24	.01	.00	.00	.00
28	27	56	34	38	31	85	678	21	.00	.00	.00	.00
29	30	37	32	38	28	189	525	22	.00	127	.00	.00
30	29	32	31	34	---	317	202	23	.13	266	.00	.00
31	28	---	31	34	---	315	---	26	---	51	.00	---
TOTAL	1677	1390	1179	1591	1097	4110	6266	2124	488.78	462.63	237.60	.00
MEAN	54.1	46.3	38.0	51.3	37.8	133	209	68.5	16.3	14.9	7.66	.000
MAX	200	164	98	267	73	477	1100	186	34	266	31	.00
MIN	25	27	28	28	28	23	64	21	.00	.00	.00	.00
(†)	35.6	31.7	29.2	27.9	30.2	39.6	35.7	39.2	40.8	52.9	33.7	29.4
MEAN‡	89.7	78.0	67.2	79.2	68.0	173	245	108	57.1	67.8	41.4	29.4
CFSM‡	1.85	1.61	1.39	1.63	1.40	3.56	5.05	2.22	1.18	1.40	0.85	0.61
IN‡	2.13	1.80	1.60	1.88	1.51	4.09	5.62	2.56	1.31	1.61	0.98	0.68

CAL YR 1979 TOTAL 32120.80 MEAN 88.0 MAX 1740 MIN .60 MEAN‡ 125 CFSM‡ 2.58 IN‡ 35.07
WTR YR 1980 TOTAL 20623.01 MEAN 56.3 MAX 1100 MIN .00 MEAN‡ 91.9 CFSM‡ 1.89 IN‡ 25.80

† Diversion and change in contents in Swimming River Reservoir, in cubic feet per second.
‡ Adjusted for diversion and change in contents.

01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 24...	1330	122	--	16.0	9.1	2.0	20	9	48
FEB 13...	1215	215	7.2	3.0	--	--	20	2	59
APR 08...	1140	162	7.1	19.0	11.0	1.8	20	23	51
MAY 27...	1200	192	7.0	21.5	8.0	2.3	50	33	48
JUL 08...	1115	166	7.0	19.0	3.7	1.4	50	70	55
AUG 05...	1115	198	7.5	18.0	7.2	2.2	50	33	58
SEP 22...	1145	500	6.7	22.0	5.9	<1.5	790	110	70

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	14	3.1	7.7	2.7	18	--	18	15	.2
FEB 13...	18	3.3	9.9	2.4	24	--	23	21	.2
APR 08...	16	2.7	9.5	2.2	24	--	24	17	.2
MAY 27...	14	3.1	8.6	1.9	17	.0	22	16	.3
JUL 08...	16	3.6	9.8	2.3	30	--	20	18	.3
AUG 05...	17	3.8	11	2.4	38	--	21	19	.4
SEP 22...	14	8.4	53	4.6	25	.0	18	100	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 24...	8.1	102	.64	.100	1.2	1.3	1.9	.06	3.0
FEB 13...	9.2	111	1.2	.120	--	E.45	--	.05	4.6
APR 08...	7.2	108	1.3	.210	.38	.59	1.9	--	3.6
MAY 27...	6.6	99	1.1	.720	--	E.80	--	.13	8.1
JUL 08...	7.1	118	.65	.150	.84	.99	1.6	.03	2.5
AUG 05...	7.1	120	.29	.130	.49	.62	.91	.06	3.8
SEP 22...	7.6	261	.61	.070	.46	.53	1.1	.12	--

01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
27...	1200	70	1	0	2	0	<10	3
SEP								
22...	1145	20	2	0	70	0	10	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
27...	460	4	50	.4	2	0	10	0
SEP								
22...	1200	2	160	.2	3	0	20	0

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°11'56", long 74°04'14", Monmouth County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from bridge on Remsen Mill Road, 0.3 mi (0.5 km) downstream from Robins Swamp Brook, and 1.7 mi (2.7 km) west of Neptune City.

DRAINAGE AREA.--9.96 mi² (25.80 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7.05 ft (2.149 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Diversion above station by Monmouth Consolidated Water Co. for municipal supply and by farmers for irrigation.

COOPERATION.--Water-stage recorder inspected by Monmouth Consolidated Water Co.

AVERAGE DISCHARGE.--14 years, 15.2 ft³/s (0.430 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft³/s (16.4 m³/s) Dec. 26, 1969, gage height, 7.94 ft (2.420 m); no flow part of Aug. 20, 21, 22, 1978 and Feb. 16, Mar. 1, 2, July 1, 4, 5, Aug. 24, 25, Sept. 12, 15, 18, 19, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s (8.21 m³/s) Apr. 10, gage height, 5.68 ft (1.731 m); no flow part of Feb. 16, Mar. 1, 2, July 1, 4, 5, Aug. 24, 25, Sept. 12, 15, 18, 19; minimum daily discharge, 0.68 ft³/s (0.019 m³/s) Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	11	12	15	12	3.7	126	38	8.0	6.5	13	7.6
2	28	11	11	15	12	1.1	47	31	9.3	3.7	11	6.9
3	34	35	11	15	12	1.4	28	22	8.6	12	9.7	6.3
4	22	25	11	14	12	2.1	51	16	4.6	4.7	6.9	6.2
5	31	15	11	15	7.7	2.2	34	13	2.1	6.5	8.8	6.7
6	93	13	12	15	.99	2.6	22	11	1.8	8.5	18	7.0
7	6	12	20	15	1.5	2.3	17	10	2.2	3.7	6.5	6.7
8	19	11	13	16	1.5	5.5	15	16	3.1	3.0	3.6	6.5
9	17	11	11	14	1.6	6.4	56	17	4.9	2.7	2.5	6.5
10	87	12	9.7	13	1.6	4.9	212	12	8.7	2.6	2.0	6.5
11	72	26	13	22	5.1	33	58	11	3.1	3.0	2.0	6.4
12	28	65	16	86	13	17	34	15	6.8	10	18	5.5
13	27	33	28	26	8.3	11	28	19	6.3	2.4	4.6	6.3
14	26	28	27	19	1.9	103	28	19	6.1	5.1	2.6	6.9
15	22	25	19	18	3.4	34	35	16	6.0	9.5	2.5	4.8
16	21	24	17	16	7.6	19	24	14	6.9	14	2.5	7.3
17	21	22	18	15	9.0	18	15	13	6.2	20	1.9	7.1
18	21	22	16	15	3.6	31	13	16	5.6	11	2.9	9.5
19	20	22	16	47	2.3	23	11	17	5.2	9.5	2.9	1.5
20	20	22	16	23	3.0	15	10	14	5.1	9.2	2.7	7.3
21	20	21	17	17	3.7	55	9.5	29	4.8	8.3	1.6	7.2
22	20	20	19	16	6.0	107	9.1	25	4.3	8.5	1.4	7.0
23	20	20	26	20	13	44	8.5	16	4.2	13	1.2	6.7
24	20	20	30	11	8.8	23	8.2	13	3.7	8.5	.68	6.5
25	20	20	56	8.6	6.7	116	8.0	12	3.3	3.9	1.0	3.9
26	19	53	31	8.0	5.6	37	8.3	9.9	2.8	8.9	8.1	2.3
27	19	47	21	7.3	2.3	23	10	8.8	4.3	8.6	7.2	7.3
28	19	19	18	6.9	2.0	15	50	6.7	5.3	8.9	7.0	6.9
29	19	15	18	3.4	1.4	49	150	1.9	3.5	41	7.2	7.4
30	14	13	17	2.4	---	74	54	3.7	11	48	7.2	7.3
31	11	---	16	1.9	---	70	---	8.3	---	21	7.6	---
TOTAL	871	693	576.7	536.5	169.59	949.2	1179.6	474.3	157.8	326.2	174.78	192.0
MEAN	28.1	23.1	18.6	17.3	5.85	30.6	39.3	15.3	5.26	10.5	5.64	6.40
MAX	93	65	56	86	13	116	212	38	11	48	18	9.5
MIN	11	11	9.7	1.9	.99	1.1	8.0	1.9	1.8	2.4	.68	1.5

CAL YR 1979 TOTAL 8752.00 MEAN 24.0 MAX 213 MIN 3.9
WTR YR 1980 TOTAL 6300.67 MEAN 17.2 MAX 212 MIN .68

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 24...	0930	20	132	--	13.0	8.7	3.0	230	540	37
FEB 14...	1015	1.2	154	6.9	1.0	--	<.3	50	8	38
APR 16...	1040	28	142	6.9	10.0	10.2	<1.1	70	79	29
MAY 27...	1045	9.4	151	7.1	13.5	9.3	2.9	20	920	36
JUL 08...	0945	3.4	151	7.2	16.5	7.0	1.7	110	350	40
AUG 05...	0930	3.1	157	6.8	20.0	7.6	1.5	130	--	42
SEP 22...	0930	7.1	--	7.1	18.0	8.2	E1.4	210	280	42

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	11	2.3	12	4.0	25	.0	19	17	.1
FEB 14...	12	1.9	11	2.3	16	--	21	16	.1
APR 16...	8.3	2.0	9.3	3.5	16	--	18	13	.1
MAY 27...	11	2.0	11	2.8	17	.0	18	16	.1
JUL 08...	13	1.9	9.6	2.6	19	--	20	17	.1
AUG 05...	13	2.3	11	3.1	16	--	21	17	.2
SEP 22...	14	1.8	9.2	2.5	21	.0	19	15	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 24...	13	135	.39	.400	2.5	2.9	3.3	.25	12
FEB 14...	12	101	E.35	.490	.17	.66	--	.12	1.2
APR 16...	7.7	92	.62	.460	.74	1.2	1.8	.40	6.3
MAY 27...	12	99	.54	.440	.52	.96	1.5	.17	5.0
JUL 08...	12	98	.29	.190	.39	.58	.87	.08	3.9
AUG 05...	14	100	.29	.200	.46	.66	.95	.18	4.1
SEP 22...	16	102	.13	.080	.37	.45	.58	.18	2.8

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 24...	0930	400	2	0	0	60	1	<10	<10	<10
MAY 27...	1045	30	0	--	0	10	0	--	<10	--
SEP 22...	0930	40	0	--	0	40	0	--	30	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT 24...	55	<10	6300	8400	7	30	50	10	.2	.00
MAY 27...	2	--	3200	--	14	--	40	--	<.1	--
SEP 22...	2	--	1700	--	1	--	30	--	<.1	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 24...	3	0	0	20	70	0	5	.0	.0	14
MAY 27...	1	0	--	20	--	0	--	--	--	--
SEP 22...	3	0	--	30	--	2	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 24...	1.7	1.3	1.6	.0	1.1	.0	.0	.0	.0	.0
MAY 27...	--	--	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 24...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 27...	--	--	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--	--	--

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from dam on Jumping Brook Reservoir, 0.85 mi (1.37 km) upstream from mouth, and 1.4 mi (2.3 km) west of Neptune City. Water-quality samples collected at bridge 600 ft (183 m) downstream from gage at high flows.

DRAINAGE AREA.--6.43 mi^2 (16.65 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 24...	1130	4.2	142	--	14.0	8.4	1.0	490	920	31
FEB 14...	1100	3.9	230	6.2	.5	--	<.4	<20	<2	30
APR 16...	1140	19	147	6.0	10.0	5.4	<.5	20	17	29
MAY 27...	1230	4.9	154	6.6	16.5	9.3	2.0	490	130	35
JUL 08...	1130	2.4	143	6.9	18.5	7.4	2.0	490	130	30
AUG 05...	1100	5.7	138	6.4	23.0	6.6	1.8	330	--	31
SEP 22...	1100	2.2	126	6.5	20.0	7.3	E2.0	20	170	30

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	8.7	2.3	11	2.5	7	.0	25	18	.1
FEB 14...	8.3	2.3	11	2.0	6	--	27	18	.1
APR 16...	8.4	2.0	9.0	2.0	5	--	25	15	.1
MAY 27...	9.9	2.4	12	2.2	10	--	27	18	.1
JUL 08...	8.3	2.3	11	2.5	4	--	24	19	.1
AUG 05...	8.2	2.5	11	2.5	9	--	24	18	.1
SEP 22...	8.2	2.3	9.9	2.8	7	.0	24	15	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 24...	8.1	110	.20	.100	.92	1.0	1.2	.12	9.9
FEB 14...	8.3	78	.39	.300	.03	.33	.72	.21	1.5
APR 16...	4.7	84	.95	.240	.38	.62	1.6	.53	7.4
MAY 27...	6.2	100	.39	.800	.30	1.1	1.5	.24	8.7
JUL 08...	7.9	84	.29	.240	.51	.75	1.0	.11	3.1
AUG 05...	8.7	96	.29	.160	.46	.62	.91	.12	5.1
SEP 22...	10	87	.13	.100	.27	.37	.50	.64	3.3

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 24...	1130	800	.0	6.7	190	1	0	0	40	1	<10
SEP 22...	1100	410	.2	2.7	30	0	0	0	40	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 24...	<10	<10	<10	10	<10	2900	1900	7	10	60	<10
SEP 22...	10	<10	<10	3	10	1900	11000	5	180	60	120

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 24...	.2	.00	3	<10	0	0	30	10	0	45	--
SEP 22...	.3	.00	6	<10	0	0	70	60	3	10	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 24...	.0	9	.0	.0	1.4	.0	.0	--	.0	.0	.0
SEP 22...	.0	5	3.5	.0	.7	.0	.4	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 24...	.0	.0	.0	.0	.0	.0	.0	.0	--	0	.0
SEP 22...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01407830 MANASQUAN RIVER NEAR GEORGIA, NJ

LOCATION.--Lat 40°12'36", long 74°16'41", Monmouth County, Hydrologic Unit 02040301, at bridge on Jacksons Mill Road, 0.5 mi (0.8 km) upstream from Debois Creek, 0.9 mi (1.4 km) southwest of intersection of Jacksons Mill Road with State Route 524, 1.3 mi (2.1 km) southwest of Adelphia, and 1.6 mi (2.6 km) north of Georgia.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-74, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 22...	1115	210	5.4	15.5	7.1	--	60	130	51
JAN 30...	1200	233	6.8	1.0	--	2.0	<20	2	51
APR 02...	1030	152	6.7	6.0	11.0	5.2	330	79	39
MAY 27...	1100	205	7.0	14.0	8.8	8.2	220	350	48
JUL 08...	1000	260	6.7	16.0	5.1	3.2	330	920	56
AUG 05...	1020	230	6.3	21.0	5.5	4.0	230	920	53
SEP 22...	1100	286	7.0	20.0	4.8	3.9	9200	920	55

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 22...	14	4.0	11	4.8	18	.0	27	17	.3
JAN 30...	14	3.8	12	3.7	17	--	29	16	.3
APR 02...	9.7	3.5	8.3	3.7	7	--	24	12	.2
MAY 27...	13	3.8	11	4.2	17	.0	26	17	.3
JUL 08...	17	3.4	14	4.8	49	--	26	23	.5
AUG 05...	15	3.8	16	5.4	17	--	31	22	.4
SEP 22...	17	3.0	18	6.1	16	.0	26	22	.5

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 22...	24	137	1.2	2.200	1.0	3.2	4.4	1.0	4.8
JAN 30...	23	125	1.5	2.500	.00	2.5	4.0	.90	6.6
APR 02...	14	110	2.3	.540	1.1	1.6	3.9	.35	4.4
MAY 27...	22	128	.96	1.800	1.4	3.2	4.2	1.2	6.9
JUL 08...	21	136	.33	3.200	2.9	6.1	6.4	1.0	5.6
AUG 05...	24	141	.45	1.300	2.1	3.4	3.8	.98	5.5
SEP 22...	25	152	.15	4.900	.90	5.8	6.0	2.4	5.8

01407830 MANASQUAN RIVER NEAR GEORGIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
22...	1115	--	--	--	40	1	--	0	60	0	--
MAY											
27...	1100	--	--	--	20	1	--	0	40	0	--
SEP											
22...	1100	2300	1.0	10	10	2	0	0	130	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT											
22...	10	--	--	9	--	6700	--	2	--	90	--
MAY											
27...	10	--	--	5	--	6100	--	3	--	70	--
SEP											
22...	10	90	<10	7	10	2500	62000	3	30	110	110

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
22...	.1	--	7	--	0	--	20	--	2	--	--
MAY											
27...	.2	--	9	--	0	--	20	--	0	--	--
SEP											
22...	<.1	.00	3	<10	0	0	30	120	4	5	.0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
22...	--	--	--	--	--	--	--	--	--	--	--
MAY											
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
22...	.0	11	5.1	3.3	2.7	.0	.6	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
22...	--	--	--	--	--	--	--	--	--	--	--
MAY											
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
22...	.0	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01407997 MARSH BOG BROOK AT SQUANKUM, NJ

LOCATION.--Lat 40°10'01", long 74°09'33", Monmouth County, Hydrologic Unit 02040301, at bridge on Squankum-Yellow Brook Road in Squankum, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--4.91 mi² (12.72 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-74, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 22...	1000	4.2	146	5.9	14.5	5.7	--	330	170	32
JAN 30...	1030	4.5	160	6.2	.0	--	1.0	<20	17	30
APR 02...	1200	34	85	5.8	6.0	11.6	<1.3	<20	33	14
MAY 27...	1200	3.8	114	6.4	13.5	8.8	.7	70	130	30
JUL 08...	1240	E1.1	136	6.3	17.0	8.7	1.1	170	>2400	35
AUG 05...	1115	2.5	185	6.0	22.0	7.2	2.2	310	>2400	31
SEP 22...	1230	--	210	6.8	20.0	7.9	E2.4	120	540	49

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 22...	9.9	1.7	13	3.7	8	.0	18	17	.1
JAN 30...	9.4	1.6	8.4	2.3	10	--	21	13	.1
APR 02...	4.1	1.0	6.7	2.0	3	--	15	10	.1
MAY 27...	9.2	1.6	6.8	2.3	7	--	18	11	.1
JUL 08...	11	1.8	7.1	2.9	8	--	19	13	.2
AUG 05...	9.7	1.7	16	3.8	15	--	21	23	.2
SEP 22...	16	2.1	16	4.5	25	.0	20	23	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 22...	13	106	<1.0	.700	1.3	2.0	--	1.0	12
JAN 30...	12	88	.32	.960	.00	.96	1.3	.22	4.6
APR 02...	5.9	35	.65	.180	.46	.64	1.3	.14	6.4
MAY 27...	12	88	.23	.360	.49	.85	1.1	.42	14
JUL 08...	12	85	.40	.340	.38	.72	1.1	.67	4.6
AUG 05...	13	114	.29	.480	.92	1.4	1.7	.74	3.2
SEP 22...	13	130	.52	.210	.57	.78	1.3	.25	5.8

01407997 MARSH BOG BROOK AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
22...	1000	110	1	0	40	0	30	30
SEP								
22...	1230	20	0	0	50	0	10	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
22...	4800	1	50	.2	4	0	20	0
SEP								
22...	1400	1	20	.1	3	0	30	7

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'47", long 74°09'21", Monmouth County, Hydrologic Unit 02040301, on right bank 20 ft (6.1 m) downstream from bridge on State Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi (0.6 km) downstream from Marsh Bog Brook.

DRAINAGE AREA.--43.4 mi^2 (112.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to current year. Monthly discharge only for July 1931, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 18.82 ft (5.736 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 13, 1940, water-stage recorder at site 80 ft (24 m) upstream at same datum.

REMARKS.--Water-discharge records good except those for period of no gage-height record, May 29 to June 30, which are fair.

AVERAGE DISCHARGE.--49 years, 76.0 ft^3/s (2.152 m^3/s), 23.78 in/yr (604 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) Sept. 21, 1938, gage height, 12.45 ft (3.795 m), from floodmark, site then in use, from rating curve extended above 900 ft^3/s (25.5 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 12.9 ft^3/s (0.37 m^3/s) Sept. 10, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0245	600	17.0	5.60	1.707	Apr. 28	2145	668	18.9	5.92	1.804
Mar. 25	1515	799	22.6	6.48	1.975	July 30	0515	1080	30.6	7.46	2.274
Apr. 10	1130	*1360	38.5	8.41	2.563						

Minimum discharge, 23 ft^3/s (0.65 m^3/s) Sept. 8, 11, 12, 13, 14, 15, gage height, 2.49 ft (0.759 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	51	64	57	50	43	519	147	51	38	74	28
2	115	52	61	56	48	45	243	125	50	34	57	28
3	70	94	58	56	47	44	159	109	62	62	48	28
4	63	88	58	54	48	45	250	96	58	54	46	26
5	99	63	57	56	48	49	200	88	55	40	74	26
6	262	57	59	55	48	50	139	85	49	50	122	27
7	87	54	86	54	49	49	120	81	48	37	60	26
8	70	52	66	58	49	56	110	103	48	35	48	25
9	62	52	58	55	49	62	224	97	49	36	43	25
10	258	53	56	54	49	53	1080	82	56	33	39	25
11	251	71	58	65	48	122	313	76	60	32	37	25
12	114	163	55	258	49	72	182	89	52	32	90	24
13	107	91	82	105	47	64	149	136	47	29	53	24
14	86	84	98	85	48	378	143	98	44	29	43	24
15	75	71	67	78	49	178	203	80	45	29	41	38
16	70	65	61	70	66	110	137	72	48	32	39	29
17	67	60	64	65	65	91	117	68	46	106	35	27
18	65	58	55	66	51	133	108	74	45	41	34	59
19	63	56	55	155	50	95	101	77	43	34	35	36
20	61	55	56	95	50	81	97	69	42	31	35	34
21	59	54	56	78	51	206	96	98	40	29	35	32
22	58	54	61	73	61	450	91	93	40	29	34	31
23	57	53	79	92	80	242	88	73	39	45	33	31
24	56	53	86	72	67	138	86	65	38	44	31	30
25	55	52	149	65	61	521	86	62	37	32	30	32
26	53	151	105	62	57	206	84	56	37	30	30	49
27	52	193	80	59	51	139	97	53	36	28	29	31
28	52	95	69	60	51	117	367	52	36	27	29	28
29	54	79	65	57	48	196	377	52	39	258	29	27
30	52	70	62	54	---	318	169	51	56	583	30	29
31	51	---	59	52	---	284	---	52	---	129	28	---
TOTAL	2723	2244	2145	2321	1535	4637	6135	2559	1396	2048	1391	904
MEAN	87.8	74.8	69.2	74.9	52.9	150	205	82.5	46.5	66.1	44.9	30.1
MAX	262	193	149	258	80	521	1080	147	62	583	122	59
MIN	51	51	55	52	47	43	84	51	36	27	28	24
CFSM	2.02	1.72	1.59	1.73	1.22	3.46	4.72	1.90	1.07	1.52	1.04	.69
IN.	2.33	1.92	1.84	1.99	1.32	3.97	5.26	2.19	1.20	1.76	1.19	.77

CAL YR 1979 TOTAL 42105 MEAN 115 MAX 1260 MIN 38 CFSM 2.65 IN 36.09
WTR YR 1980 TOTAL 30038 MEAN 82.1 MAX 1080 MIN 24 CFSM 1.89 IN 25.75

01408070 NORTH BRANCH METEDECONK RIVER NEAR WYCKOFF MILLS, NJ

LOCATION.--Lat 40°10'52", long 74°17'17", Monmouth County, Hydrologic Unit 02040301, at bridge on Jackson Mills Road in Wyckoff Mills, 0.4 mi (0.7 km) southwest of Georgia, 3.1 mi (4.9 km) southwest of Adelphia, and 4.0 mi (6.0 km) upstream from outflow of Aldrich Lake.

DRAINAGE AREA.--5.52 mi^2 (14.30 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 22...	1230	6.7	67	5.4	15.0	6.0	--	110	350	22
MAR 13...	0840	4.9	68	6.5	1.5	12.0	E2.0	<20	21	17
APR 02...	0915	38	61	4.4	5.0	10.0	E2.0	<20	17	7
MAY 27...	0930	3.0	71	6.2	12.0	7.6	1.1	80	350	21
JUL 08...	0910	E1.2	108	6.2	15.0	7.7	.9	220	>2400	38
AUG 05...	0920	E1.6	100	6.0	19.5	6.2	.7	130	--	32
SEP 22...	1000	E1.2	137	6.9	16.5	7.0	<1.1	790	240	51

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 22...	7.5	.8	4.7	1.6	8	--	9.9	7.7	.1
MAR 13...	5.3	.9	3.8	1.3	10	--	13	5.9	.1
APR 02...	1.9	.5	2.5	.8	0	--	8.9	3.4	.1
MAY 27...	6.9	.8	5.1	1.2	9	.4	9.0	6.2	.1
JUL 08...	13	1.3	3.4	1.8	25	--	11	6.3	.2
AUG 05...	11	1.2	3.9	1.9	15	--	16	6.7	.2
SEP 22...	18	1.5	3.1	2.2	29	.0	16	5.5	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 22...	11	86	<1.0	.300	1.4	1.7	--	.56	21
MAR 13...	8.9	62	.03	.160	1.0	1.2	1.2	.13	5.0
APR 02...	3.7	38	.41	.030	.80	.83	1.2	.19	10
MAY 27...	10	--	.06	.120	.50	.62	.68	2.2	22
JUL 08...	12	69	.05	.300	.34	.64	.69	.20	11
AUG 05...	13	86	.11	.180	.40	.58	.69	.43	5.1
SEP 22...	17	90	<.05	.100	.35	.45	--	.40	3.8

01408070 NORTH BRANCH METEDECONK RIVER NEAR WYCKOFF MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 22...	1230	--	--	0	--	--	--	<10	--	10
MAY 27...	0930	210	1	--	0	60	0	--	10	--
SEP 22...	1000	20	1	--	0	60	1	--	10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT 22...	--	<10	--	12000	--	20	--	10	--	.00
MAY 27...	6	--	8900	--	2	--	40	--	.4	--
SEP 22...	2	--	3100	--	7	--	30	--	.1	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 22...	--	--	0	--	30	--	5	.0	.0	4
MAY 27...	1	0	--	180	--	0	--	--	--	--
SEP 22...	2	0	--	40	--	1	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 22...	2.6	2.0	.5	.0	.0	.0	.0	.0	.0	.0
MAY 27...	--	--	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 22...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0
MAY 27...	--	--	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--	--	--

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ

LOCATION.--Lat 40°05'30", long 74°09'10", Ocean County, Hydrologic Unit 02040301, on upstream right bank at bridge on State Route 549, 1.0 mi (1.6 km) upstream from confluence with South Branch Metedeconk River, and 2.3 mi (3.7 km) east of Lakewood.

DRAINAGE AREA.--34.9 mi² (90.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.89 ft (1.186 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, Oct. 11 to Nov. 15 and Dec. 5 to Jan. 15, which are fair.

AVERAGE DISCHARGE.--8 years, 69.9 ft³/s (1.980 m³/s), 27.20 in/yr (691 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft³/s (38.7 m³/s) Nov. 8, 1977, gage height, 9.28 ft (2.829 m), from rating extended above 500 ft³/s (14.2 m³/s); minimum, 14 ft³/s (0.40 m³/s) July 6, 1977, gage height, 2.35 ft (0.716 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 1	1530	257	7.28	6.28	1.914
Apr. 10	1515	*577	16.3	7.56	2.304

Minimum discharge, 16 ft³/s (0.45 m³/s) Sept. 12, 13, gage height, 2.48 ft (0.756 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	42	53	53	38	35	239	133	41	36	54	20
2	84	42	50	52	38	36	221	98	40	29	38	19
3	72	58	48	50	38	36	156	81	49	40	29	18
4	59	94	47	49	37	37	128	73	47	56	27	17
5	71	86	50	50	37	37	136	65	39	38	35	18
6	170	56	54	53	37	40	121	60	36	38	93	18
7	115	52	72	49	38	39	90	59	35	33	63	18
8	67	50	70	54	38	43	75	70	36	29	32	18
9	56	49	61	54	38	51	107	78	35	27	26	17
10	98	50	58	51	39	46	437	65	46	26	24	17
11	155	69	54	54	38	83	307	58	42	25	23	17
12	146	118	53	155	38	77	189	65	37	25	39	17
13	104	111	60	158	38	56	127	106	34	24	41	17
14	88	86	84	85	37	163	97	97	32	23	31	17
15	73	68	78	67	37	194	122	72	32	22	26	67
16	66	60	62	53	48	122	114	58	36	21	25	55
17	60	55	56	50	57	78	91	53	35	27	23	27
18	56	52	58	50	47	81	79	56	33	28	22	53
19	54	50	50	95	41	76	73	64	31	25	22	46
20	51	49	50	93	40	62	69	57	30	23	23	29
21	49	48	51	67	40	86	67	73	29	22	23	24
22	48	47	52	57	47	172	64	83	28	20	23	22
23	47	47	57	69	69	196	62	65	28	28	23	21
24	48	47	66	61	61	145	61	54	27	35	21	20
25	47	46	78	52	53	178	61	50	28	29	20	22
26	46	77	88	48	47	186	61	46	27	24	19	26
27	44	126	77	46	43	136	71	43	27	21	20	25
28	44	113	66	45	40	94	144	41	26	21	19	22
29	45	80	60	44	38	102	224	40	26	50	19	21
30	45	59	58	42	---	169	172	40	44	131	20	22
31	43	---	55	40	---	174	---	40	---	101	20	---
TOTAL	2225	1987	1876	1946	1237	3030	3965	2043	1036	1077	923	750
MEAN	71.8	66.2	60.5	62.8	42.7	97.7	132	65.9	34.5	34.7	29.8	25.0
MAX	170	126	88	158	69	196	437	133	49	131	93	67
MIN	43	42	47	40	37	35	61	40	26	20	19	17
CFSM	2.06	1.90	1.73	1.80	1.22	2.80	3.78	1.89	.99	.99	.85	.72
IN.	2.37	2.12	2.00	2.07	1.32	3.23	4.23	2.18	1.10	1.15	.98	.80

CAL YR 1979 TOTAL 31849 MEAN 87.3 MAX 838 MIN 31 CFSM 2.50 IN 33.95
WTR YR 1980 TOTAL 22095 MEAN 60.4 MAX 437 MIN 17 CFSM 1.73 IN 23.55

01408500 TOMS RIVER NEAR TOMS RIVER, NJ
(National stream quality accounting network station)

LOCATION.--Lat 39°59'10", long 74°13'29", Ocean County, Hydrologic Unit 02040301, on left bank 1.9 mi (3.1 km) downstream from Union Branch, and 2.6 mi (4.2 km) northwest of Toms River.

DRAINAGE AREA.--124 mi^2 (321 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October, November 1928, published in WSP 1302.

REVISED RECORDS.--WSP 1702: 1938. WDR-NJ-76-1: 1975(M). WDR-NJ-77-1: 1976.

GAGE.--Water-stage recorder. Datum of gage is 8.10 ft (2.469 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Diversions by Toms River Chemical Co., 800 ft (240 m) upstream; the effluent is returned by pipeline directly into the Atlantic Ocean, thus bypassing station.

AVERAGE DISCHARGE.--52 years, 217 ft^3/s (6.145 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Sept. 23, 1938, gage height, 12.50 ft (3.810 m), from floodmark, from rating curve extended above 1,500 ft^3/s (42 m^3/s); minimum, 46 ft^3/s (1.30 m^3/s) many days in August and September 1966, gage height, 2.70 ft (0.823 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 844 ft^3/s (23.9 m^3/s) Apr. 11, gage height, 8.32 ft (2.536 m); minimum, 61 ft^3/s (1.73 m^3/s) Sept. 12, gage height, 2.90 ft (0.884 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	174	241	189	161	151	570	497	163	156	271	84
2	225	174	218	180	169	158	623	443	157	144	229	74
3	231	193	201	176	161	152	614	344	158	139	147	72
4	237	218	189	172	159	150	594	327	178	153	121	70
5	246	228	184	176	156	152	517	297	174	155	145	70
6	283	240	181	178	156	158	472	268	164	141	238	72
7	258	229	195	175	156	158	450	255	157	131	173	74
8	252	207	202	175	157	163	406	256	155	118	139	70
9	228	196	207	174	159	175	390	257	147	112	122	68
10	255	196	198	171	160	180	539	257	162	107	109	68
11	313	217	188	172	158	200	742	254	166	106	97	66
12	357	269	181	230	156	212	794	242	157	104	99	65
13	417	289	187	261	155	215	628	249	151	99	115	67
14	397	310	203	296	153	281	516	266	148	93	116	69
15	339	311	211	308	153	319	461	280	138	88	100	97
16	282	279	212	269	164	374	424	273	139	86	103	114
17	250	249	206	244	182	370	404	245	141	90	97	99
18	234	227	198	229	181	335	372	231	139	96	89	124
19	231	224	189	239	171	297	339	229	133	97	87	135
20	222	225	187	250	165	273	314	188	129	95	89	120
21	207	209	186	259	163	274	291	233	127	87	89	105
22	206	201	189	248	168	322	279	251	125	83	88	93
23	200	194	200	243	193	388	273	250	114	94	91	86
24	197	189	213	240	206	455	264	239	109	101	87	78
25	190	186	234	229	206	501	260	218	108	99	81	82
26	187	210	244	218	199	491	260	201	106	93	78	93
27	185	255	250	207	188	480	260	184	106	91	77	95
28	183	283	239	197	176	445	295	171	113	85	74	91
29	180	302	222	189	167	412	360	165	119	114	74	83
30	178	282	210	183	---	414	433	161	155	183	78	82
31	175	---	197	176	---	451	---	162	---	218	80	---
TOTAL	7556	6966	6362	6653	4898	9106	13144	7893	4238	3558	3583	2566
MEAN	244	232	205	215	169	294	438	255	141	115	116	85.5
MAX	417	311	250	308	206	501	794	497	178	218	271	135
MIN	175	174	181	171	153	150	260	161	106	83	74	65
CFSM	1.97	1.87	1.65	1.73	1.36	2.37	3.53	2.06	1.14	.93	.94	.69
IN.	2.27	2.09	1.91	2.00	1.47	2.73	3.94	2.37	1.27	1.07	1.07	.77

CAL YR 1979 TOTAL 113445 MEAN 311 MAX 1730 MIN 134 CFSM 2.51 IN 34.03
WTR YR 1980 TOTAL 76523 MEAN 209 MAX 794 MIN 65 CFSM 1.69 IN 22.96

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	17.0	17.5	9.5	8.0	9.0	6.5	5.5	6.0	5.5	4.0	5.0
2	17.5	17.0	17.5	---	---	---	6.0	5.0	5.5	6.0	4.5	5.0
3	18.0	17.5	18.0	---	---	---	5.5	4.5	5.0	5.5	4.5	5.0
4	18.0	17.0	17.5	11.0	9.5	---	5.5	4.5	5.0	4.5	4.0	4.0
5	17.5	17.0	17.5	9.5	8.5	9.0	6.0	4.5	5.5	4.0	3.5	3.5
6	17.0	15.0	15.5	9.0	8.0	8.5	7.5	5.5	6.5	3.5	2.0	3.0
7	15.0	13.5	14.5	9.5	8.5	---	8.5	7.5	8.0	4.0	1.5	3.0
8	13.5	12.0	13.0	10.0	8.0	---	7.5	6.0	7.0	5.0	4.0	4.5
9	13.5	12.5	13.0	---	---	---	6.0	5.5	6.0	5.0	4.0	4.5
10	12.5	10.0	11.5	---	---	---	6.5	5.0	6.0	4.5	3.0	3.5
11	9.5	8.5	9.0	---	---	---	7.5	5.5	6.5	8.5	3.5	5.5
12	9.5	8.5	9.0	---	---	---	9.0	6.5	8.0	9.0	5.0	7.0
13	10.0	9.5	9.5	---	---	---	9.5	9.0	9.0	5.0	3.5	4.0
14	9.5	8.5	9.0	---	---	---	9.0	6.5	8.0	5.0	3.0	4.0
15	9.5	8.0	8.5	---	---	---	6.5	5.0	5.5	7.0	5.0	6.0
16	10.0	8.5	9.0	---	---	---	6.5	4.5	5.5	6.0	5.0	5.5
17	10.5	9.0	10.0	---	---	---	6.5	3.5	5.0	5.5	5.0	5.0
18	12.0	10.0	10.5	---	---	---	4.0	2.5	3.5	6.5	5.0	5.5
19	12.0	11.0	11.5	8.5	7.0	8.0	3.5	2.5	3.0	6.5	6.0	6.5
20	13.0	11.5	12.0	---	---	---	4.0	2.0	3.5	6.0	4.5	5.5
21	14.0	12.5	13.0	---	---	---	5.5	4.0	5.0	4.5	3.5	4.0
22	15.5	13.5	14.0	---	---	---	6.5	5.5	6.0	4.0	3.0	3.5
23	16.0	14.5	15.5	---	---	---	7.5	6.0	6.5	5.0	4.0	4.5
24	16.0	13.0	14.0	---	---	---	8.5	7.0	7.5	3.5	2.0	2.5
25	12.5	10.5	11.5	---	---	---	10.5	8.5	10.0	3.0	2.0	2.5
26	10.5	9.5	10.0	---	---	---	9.5	8.0	9.0	3.0	2.0	2.5
27	9.0	8.0	8.0	15.0	13.5	---	7.5	6.5	7.0	3.5	2.0	2.5
28	8.0	7.5	8.0	13.5	12.0	13.0	6.5	5.5	6.0	4.5	3.0	4.0
29	9.0	7.5	8.0	12.0	9.0	10.5	7.0	5.5	6.0	4.5	3.5	3.5
30	9.0	8.0	8.5	8.5	6.5	7.5	7.0	5.5	6.0	3.0	2.5	2.5
31	9.0	7.5	8.5	---	---	---	6.0	5.0	5.5	3.0	2.0	2.5
MONTH	18.0	7.5	12.0	15.0	6.5	9.5	10.5	2.0	6.0	9.0	1.5	4.0
		FEBRUARY			MARCH			APRIL			MAY	
1	3.0	1.5	2.0	2.5	1.0	1.5	8.5	6.0	7.5	14.0	12.5	13.0
2	2.0	1.5	1.5	3.0	1.5	2.0	9.5	7.5	8.5	16.5	13.5	15.0
3	2.5	1.0	1.5	4.0	1.5	3.0	11.5	8.5	10.5	18.5	15.5	17.0
4	3.5	1.5	2.5	5.0	2.5	4.0	12.0	10.5	11.5	19.5	17.0	18.5
5	4.0	2.0	3.0	6.5	4.5	6.0	12.0	10.5	11.0	21.0	17.5	19.5
6	3.5	2.5	3.0	7.5	6.0	6.5	12.5	10.0	11.5	21.5	19.5	20.5
7	4.5	3.5	4.0	8.0	6.0	7.0	14.0	11.0	12.5	21.5	19.5	20.5
8	4.5	3.0	4.0	10.0	7.5	9.0	15.5	13.0	14.5	20.0	16.5	18.0
9	4.5	3.5	4.0	10.5	7.5	9.0	15.5	14.0	14.5	17.0	15.0	16.0
10	4.5	3.5	4.0	10.0	7.0	8.5	16.5	14.0	15.0	17.5	14.0	16.0
11	4.5	3.0	3.5	9.0	5.5	8.0	17.0	15.0	16.0	17.0	15.5	16.5
12	5.0	4.0	4.5	6.5	4.5	5.5	17.0	15.0	16.0	18.5	16.5	17.5
13	4.5	3.0	3.5	4.5	3.5	4.0	19.0	16.0	17.5	21.0	17.5	19.5
14	5.0	3.5	4.0	4.0	3.0	3.5	17.5	14.5	16.0	22.0	19.5	20.5
15	6.0	4.0	5.0	4.5	2.5	3.5	16.5	14.5	15.5	20.5	18.5	19.5
16	6.0	4.0	5.0	5.0	3.0	4.0	15.5	11.5	14.0	19.5	16.5	18.0
17	3.5	2.5	3.0	8.5	4.5	6.5	12.5	10.0	11.5	20.0	16.5	18.0
18	3.5	1.5	2.5	10.0	8.5	9.5	14.0	11.0	12.5	19.0	17.0	17.5
19	4.5	2.0	3.5	10.0	8.0	9.0	15.0	12.5	14.0	21.0	16.5	18.5
20	6.0	3.5	4.5	10.0	8.5	9.5	16.0	13.5	15.0	20.0	18.5	19.5
21	7.0	4.5	5.5	10.5	9.0	10.0	18.0	15.0	16.5	20.0	17.5	18.5
22	6.5	6.0	6.0	9.0	6.0	7.5	17.0	15.0	16.0	20.5	17.0	18.5
23	7.0	5.5	6.5	8.5	5.5	7.5	16.5	14.0	15.5	22.5	19.5	21.0
24	7.0	5.5	6.0	8.0	7.0	8.0	17.0	14.5	16.0	22.0	21.0	21.5
25	5.5	4.5	5.0	8.0	6.5	7.5	17.0	15.5	16.5	23.0	21.0	21.5
26	5.5	3.0	4.0	8.0	6.5	7.5	16.5	14.5	15.5	22.0	20.5	21.0
27	3.5	2.5	3.0	9.0	6.5	8.0	14.5	13.5	14.0	20.5	18.0	19.5
28	4.0	2.5	3.5	8.5	7.0	8.0	13.5	12.5	13.0	20.0	18.0	19.0
29	3.0	1.0	2.5	9.0	8.5	9.0	13.0	12.0	12.5	20.5	18.5	19.5
30	---	---	---	10.5	9.0	10.0	13.5	12.5	13.0	19.5	18.5	19.0
31	---	---	---	10.0	6.5	8.5	---	---	---	19.5	18.0	19.0
MONTH	7.0	1.0	4.0	10.5	1.0	7.0	19.0	6.0	14.0	23.0	12.5	18.5

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	18.5	20.5	23.5	20.5	21.5	24.0	22.0	23.0	24.0	21.0	22.0
2	23.5	21.0	22.0	24.0	21.0	22.5	25.0	22.5	23.5	25.0	22.0	23.5
3	24.0	21.5	22.5	23.0	21.5	22.0	26.5	23.0	24.5	25.5	22.5	24.0
4	23.0	21.0	22.0	24.5	21.0	22.5	26.0	23.0	24.5	24.5	21.0	22.5
5	21.5	19.5	20.5	23.5	21.5	22.5	24.5	23.0	23.5	23.0	21.0	22.0
6	22.0	19.0	20.5	24.0	22.0	23.0	26.0	22.5	24.0	22.5	20.0	21.5
7	21.5	19.5	20.5	23.0	20.0	22.0	25.5	22.5	24.0	22.0	20.0	21.5
8	22.5	20.0	21.0	22.0	20.5	21.0	25.5	22.5	24.0	21.5	19.0	20.5
9	20.0	18.5	19.5	23.0	20.0	21.5	26.0	23.5	24.5	21.0	19.0	20.0
10	18.5	17.0	18.0	22.5	21.0	22.0	25.0	22.5	24.0	21.5	19.5	20.5
11	19.5	15.5	17.0	24.5	21.5	23.0	25.5	22.5	24.0	20.5	18.5	19.5
12	20.0	16.0	18.0	24.5	22.0	23.0	25.0	23.0	24.0	20.5	18.5	19.5
13	19.0	16.5	18.0	23.0	20.0	22.0	24.5	21.5	23.0	20.5	18.0	19.0
14	20.0	17.0	18.5	24.5	20.0	22.0	23.5	21.0	22.0	21.5	19.0	20.0
15	21.0	18.5	19.5	24.5	21.0	23.0	22.0	21.5	22.0	21.0	19.5	20.0
16	20.0	19.0	20.0	25.5	22.0	24.0	22.0	20.0	21.0	19.5	18.5	19.0
17	20.5	17.5	19.0	25.0	22.5	24.0	21.0	18.5	20.0	19.5	18.0	19.0
18	20.0	19.0	19.5	25.5	22.5	24.0	20.0	18.5	19.5	21.0	19.5	20.0
19	20.5	18.0	19.0	24.0	22.0	23.0	20.0	18.5	19.5	20.0	18.5	19.0
20	20.5	19.0	19.5	27.0	22.5	24.0	20.0	19.0	19.5	19.5	17.5	18.5
21	20.5	17.0	19.0	28.0	24.0	26.0	20.0	18.5	19.0	21.0	19.0	20.0
22	21.5	18.5	20.0	27.5	24.5	26.0	19.5	18.5	19.0	23.0	20.0	21.5
23	22.5	19.5	20.5	26.0	23.0	24.0	20.5	18.0	19.0	23.0	21.5	22.5
24	22.5	19.5	21.0	24.5	21.5	23.0	21.0	18.5	20.0	21.5	19.5	20.0
25	23.5	21.0	22.5	24.5	21.0	22.5	21.5	19.0	20.0	19.5	18.5	19.0
26	22.5	20.5	21.5	23.5	21.0	22.5	22.0	19.5	20.5	19.5	18.0	18.5
27	25.0	21.0	23.0	23.0	21.0	22.0	24.0	20.0	22.0	17.5	15.0	15.5
28	23.5	22.0	22.5	24.0	20.5	22.5	24.0	21.5	22.5	16.0	13.5	15.0
29	23.5	21.5	22.0	23.0	22.0	22.0	22.5	21.0	21.5	16.0	14.5	15.5
30	23.5	21.5	22.5	24.0	21.5	22.5	22.5	20.5	21.5	17.0	15.5	16.0
31	---	---	---	24.0	21.5	22.5	23.0	20.5	22.0	---	---	---
MONTH	25.0	15.5	20.5	28.0	20.0	23.0	26.5	18.0	22.0	25.5	13.5	20.0
YEAR	28.0	1.0	13.5									

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	71	69	70	---	---	---	67	61	63	57	54	56
2	70	68	69	---	---	---	63	62	63	62	56	57
3	72	68	69	---	---	---	80	64	65	69	55	58
4	70	68	69	67	65	66	67	62	64	75	55	61
5	70	60	67	68	66	67	68	62	63	68	54	56
6	66	65	65	73	67	67	120	61	66	56	53	54
7	79	66	68	80	66	68	110	61	64	57	52	54
8	134	67	71	73	65	---	79	60	63	63	55	58
9	70	67	69	---	---	---	60	59	60	68	55	58
10	70	65	67	---	---	---	64	60	61	73	55	58
11	67	63	64	---	---	---	79	60	63	66	53	57
12	66	64	65	---	---	---	91	61	64	70	52	55
13	69	65	66	---	---	---	94	61	65	55	45	51
14	69	67	68	---	---	---	89	60	63	50	45	---
15	71	66	69	---	---	---	72	58	60	---	---	---
16	71	68	69	---	---	---	58	57	58	60	45	---
17	80	69	70	---	---	---	69	57	60	56	49	51
18	74	67	70	---	---	---	81	57	59	60	50	52
19	72	70	71	63	57	60	65	57	58	50	48	49
20	73	70	71	---	---	---	59	56	56	58	50	51
21	72	70	71	---	---	---	59	56	58	87	52	57
22	79	70	72	---	---	---	88	59	61	72	53	57
23	82	71	72	---	---	---	61	58	59	80	50	56
24	121	72	76	---	---	---	58	56	57	125	56	62
25	176	68	79	---	---	---	56	53	54	91	57	61
26	70	67	68	---	---	---	89	55	58	70	57	60
27	74	66	67	60	58	---	57	54	55	61	58	59
28	67	64	65	64	59	61	62	54	56	66	58	62
29	98	64	68	105	60	64	56	54	55	77	59	63
30	93	65	---	74	62	64	57	54	56	110	62	66
31	69	65	67	---	---	---	57	55	56	62	60	62
MONTH	176	60	69	105	57	65	120	53	60	125	45	57

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	73	60	64	74	59	62	56	53	54	59	53	55
2	63	58	62	67	60	62	61	54	56	58	55	57
3	63	61	62	68	62	64	62	55	58	64	57	59
4	68	62	64	74	59	64	61	56	58	63	57	60
5	102	62	68	64	59	61	61	59	60	63	56	59
6	88	62	66	92	60	64	60	57	59	71	59	62
7	103	63	68	64	58	60	61	54	59	111	57	63
8	275	62	68	60	56	58	79	57	60	185	57	67
9	64	60	62	63	55	58	60	54	57	134	55	63
10	67	61	63	78	56	59	59	49	53	131	55	61
11	84	62	66	77	57	59	61	51	55	59	55	57
12	76	62	66	61	57	59	61	54	57	175	54	68
13	214	64	77	81	56	60	59	55	57	72	56	63
14	70	64	65	63	56	60	62	54	59	63	58	60
15	77	64	66	64	58	62	64	58	60	63	55	58
16	66	63	65	63	60	62	69	54	58	140	53	64
17	68	63	65	64	61	62	69	54	58	58	54	57
18	66	62	64	74	61	63	61	55	57	59	55	57
19	91	62	65	65	61	63	61	54	58	139	58	67
20	136	63	68	67	62	64	59	55	57	146	59	71
21	147	63	70	110	59	65	94	54	60	71	55	59
22	70	62	63	95	57	60	83	53	60	58	55	56
23	66	60	63	64	56	59	73	54	60	122	54	61
24	63	60	62	60	58	59	74	56	60	59	54	57
25	63	60	61	69	58	60	150	56	63	58	56	57
26	135	60	66	74	57	59	67	55	57	61	57	59
27	66	60	61	68	58	59	59	54	57	172	55	68
28	67	60	62	75	58	61	74	55	58	111	56	60
29	79	60	63	88	57	60	73	53	56	93	57	61
30	---	---	---	75	55	57	60	52	55	112	57	62
31	---	---	---	76	53	55	---	---	---	61	58	59
MONTH	275	58	65	110	53	61	150	49	58	185	53	61

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	247	58	67	67	63	64	94	72	80	69	55	59
2	62	59	60	71	62	64	74	66	70	70	61	64
3	152	59	73	64	60	61	66	59	62	73	61	65
4	91	58	63	67	60	62	230	56	74	110	62	69
5	66	59	61	67	64	65	93	48	59	111	61	68
6	71	59	61	65	60	62	71	52	58	64	58	61
7	65	59	62	66	59	62	104	59	66	62	58	60
8	63	59	61	62	59	60	63	56	59	91	60	65
9	131	59	65	63	59	60	60	55	57	77	60	66
10	74	58	62	63	59	60	62	55	58	93	61	66
11	102	59	65	205	58	66	125	55	63	103	61	72
12	71	58	61	61	57	59	158	56	68	71	60	64
13	63	58	60	61	57	59	167	54	67	64	59	61
14	62	58	60	61	56	59	94	56	61	65	58	62
15	64	60	62	153	57	69	109	55	63	104	58	69
16	120	60	64	145	60	78	59	53	55	105	57	68
17	74	58	65	155	60	71	57	54	55	91	67	72
18	71	66	69	189	61	71	64	57	59	141	61	69
19	114	67	72	64	59	61	65	56	59	70	62	65
20	120	65	71	62	57	59	102	56	62	71	64	67
21	71	65	68	179	61	72	87	53	62	69	62	67
22	70	66	67	78	60	63	135	54	61	67	63	65
23	84	67	70	136	56	63	59	53	56	106	63	69
24	141	66	75	72	54	60	60	55	57	72	63	66
25	168	66	78	117	58	65	84	56	62	78	62	67
26	124	65	74	60	55	57	100	58	64	79	60	63
27	186	65	72	60	55	58	66	57	61	66	62	64
28	67	63	65	86	57	63	64	60	62	65	61	64
29	68	65	66	102	51	61	61	58	60	69	63	65
30	66	62	63	79	58	65	61	57	59	69	64	65
31	---	---	---	89	79	84	62	56	59	---	---	---
MONTH	247	58	66	205	51	64	230	48	62	141	55	66
YEAR	275	45	63									

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to current year.
WATER TEMPERATURES: November 1963 to May 1966, November 1974 to current year.

INSTRUMENTATION.--Temperature recorder November 1963 to May 1966, water-quality monitor since November 1974.

REMARKS.--Missing continuous water-quality records are the result of malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Sept. 15, 1977; minimum, 32 micromhos July 26, 1979.
WATER TEMPERATURES: Maximum, 28.0°C July 21, 1980; minimum 0.0°C on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 275 micromhos Feb. 8; minimum, 45 micromhos Jan. 13, 14, 16.
WATER TEMPERATURES: Maximum, 28.0°C July 21; minimum 1.0°C Feb. 3, 29 and Mar. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 25...	0830	192	87	5.0	11.5	5.0	9.0	.3	27	410
NOV 19...	1100	211	61	5.5	--	2.0	11.2	1.4	K15	96
DEC 04...	1200	190	58	4.9	4.5	4.0	12.5	3.0	16	--
JAN 23...	1100	243	59	4.8	4.5	1.0	10.4	2.1	K18	K69
FEB 29...	1030	168	57	5.4	2.0	.80	13.1	.0	10	79
MAR 20...	1100	273	59	4.9	9.0	1.0	9.9	1.9	K4	94
APR 22...	0930	280	60	4.9	14.5	1.5	9.0	1.1	K8	360
MAY 14...	1200	267	59	5.1	--	2.8	8.7	.7	190	1200
JUN 17...	1100	146	58	5.4	18.0	1.5	7.9	1.7	95	1000
JUL 22...	1030	84	62	5.7	24.0	2.9	7.5	1.2	K110	2200
AUG 06...	1200	248	54	--	24.0	14	7.2	2.1	E2600	2700
SEP 18...	1100	128	62	5.4	20.0	1.8	8.5	.9	460	1800

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 25...	22	7.2	1.0	5.5	1.4	2	9.6	17	.1	5.2
NOV 19...	11	2.9	.9	4.6	1.2	2	9.7	8.9	.0	5.1
DEC 04...	10	2.2	1.0	4.3	1.1	1	10	7.2	.0	5.1
JAN 23...	10	2.2	1.1	4.6	.9	4	12	6.6	.0	4.6
FEB 29...	10	2.3	1.0	4.7	1.2	4	10	7.2	.0	4.7
MAR 20...	10	2.2	1.0	4.6	1.1	0	10	6.5	.1	3.7
APR 22...	8	2.0	.8	4.6	1.0	2	10	7.1	.0	2.0
MAY 14...	9	2.1	.8	4.1	.9	2	8.7	4.6	.1	2.5
JUN 17...	10	2.5	1.0	4.7	1.0	1	8.8	8.4	.0	4.4
JUL 22...	10	2.2	1.2	5.6	1.3	2	8.9	8.3	.1	5.2
AUG 06...	12	2.9	1.2	4.8	1.2	2	12	7.1	.1	4.7
SEP 18...	13	3.4	1.1	5.0	1.4	4	10	9.3	.0	16

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT 25...	74	17	8.8	45	.29	.29	.080	.080	.63	.24
NOV 19...	44	16	9.1	24	.39	.39	.090	.080	.30	.29
DEC 04...	39	28	14	27	.39	.39	.140	.140	.48	.30
JAN 23...	44	9	5.9	17	.31	.30	.100	.100	.31	.31
FEB 29...	42	14	6.4	17	.35	.35	.120	.120	.28	.28
MAR 20...	42	11	8.1	41	.32	.31	.110	.110	.08	.07
APR 22...	38	147	111	6	.31	.31	.050	.050	.30	.30
MAY 14...	45	15	11	45	.27	.27	.070	.070	.39	.38
JUN 17...	45	11	4.3	62	.54	.53	.110	.110	.27	.25
JUL 22...	47	7	1.6	29	.55	.50	.080	.080	.40	.26
AUG 06...	50	20	13	72	.37	.37	.040	.000	.36	.25
SEP 18...	50	7	2.4	67	.60	.55	.060	.040	.19	.01

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)
OCT 25...	.71	.39	.32	.61	1.0	.060	.010	12	--	--
NOV 19...	.39	.02	.37	.76	.78	.030	.010	--	5.2	--
DEC 04...	.62	.18	.44	.83	1.0	.040	.010	5.4	--	--
JAN 23...	.41	.00	.41	.71	.72	.020	.010	6.3	--	--
FEB 29...	.40	.00	.40	.75	.75	.030	.010	--	2.6	--
MAR 20...	.19	.01	.18	.49	.51	.030	.010	5.3	--	--
APR 22...	.35	.00	.35	.66	.66	.020	.020	7.4	--	--
MAY 14...	.46	.01	.45	.72	.73	.050	.010	--	15	2.0
JUN 17...	.38	.02	.36	.89	.92	.060	.010	5.9	--	--
JUL 22...	.48	.14	.34	.84	1.0	.070	.000	7.7	--	--
AUG 06...	.40	.15	.25	.62	.77	.090	.010	--	7.0	1.8
SEP 18...	.25	.20	.05	.60	.85	.030	.000	5.0	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 19...	1100	3	1	2	20	0	20	0	0	0	<10
FEB 29...	1030	3	3	0	100	70	30	8	0	8	<10
MAY 14...	1200	2	1	1	<50	--	30	0	0	0	10
AUG 06...	1200	1	0	1	100	60	40	2	0	2	10
SEP 18...	1100	--	--	--	--	--	--	--	--	--	--

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV 19...	0	<10	4	0	4	2	1	1	720	430	290
FEB 29...	<10	<10	0	0	0	2	1	1	450	200	250
MAY 14...	0	10	0	0	0	1	0	1	1200	880	320
AUG 06...	0	10	0	0	0	4	0	4	1800	1600	240
SEP 18...	--	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV 19...	18	17	1	40	0	40	<.1	<.1	<.1	3	1
FEB 29...	6	6	0	40	0	40	.1	.0	<.1	6	6
MAY 14...	2	1	1	20	0	20	.1	.0	.1	4	0
AUG 06...	3	1	2	50	10	40	.1	--	<.1	2	1
SEP 18...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 19...	2	0	0	0	0	0	0	30	0	30
FEB 29...	0	0	0	0	0	0	0	250	160	90
MAY 14...	4	0	0	0	0	0	0	20	0	20
AUG 06...	1	0	0	0	0	0	0	20	0	20
SEP 18...	--	--	--	--	0	--	--	30	10	20

DATE	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
NOV 19...	24	1.10	.630	.200	.000	2350
DEC 04...	14	.790	.470	.000	.000	--
MAY 14...	20	7.64	4.65	53.0	.000	56.4
AUG 06...	14	.079	.079	.040	.000	.00

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NOV 19,79		MAR 20,80		MAY 14,80		JUN 17,80	
TIME	1100		1100		1200		1100	
TOTAL CELLS/ML	390		100		210		100	
DIVERSITY: DIVISION	0.4		1.0		1.0		1.1	
.CLASS	0.4		1.4		1.5		1.1	
..ORDER	0.4		1.8		1.5		2.0	
...FAMILY	0.4		2.5		2.1		2.0	
....GENUS	0.4		2.5		2.2		2.0	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	29	7	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	26#	25	--	-	52#	50
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	13	13	13	6	13	13
..ZYGNEMATALES								
...DESMIDIACEAE								
....STAURASTRUM	--	-	--	-	--	-	13	13
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	13	13	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	26	13	--	-
....FRAGILARIA	--	-	26#	25	13	6	--	-
...NAVICULACEAE								
....NAVICULA	--	-	13	13	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	--	-
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	100#	50	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	13	13
...SYNURACEAE								
....SYNURA	--	-	13	13	26	13	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	13	6	13	13
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	360#	93	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	13	6	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	JUL 22,80 1030	AUG 6,80 1200	SEP 18,80 1100
TOTAL CELLS/ML	260	100	1300
DIVERSITY: DIVISION	1.5	1.0	0.9
.CLASS	1.5	1.0	0.9
..ORDER	2.0	1.0	1.7
...FAMILY	2.0	1.0	2.0
....GENUS	2.0	1.0	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	52#	50	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	13	5	--	-	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	90#	35	--	-	39	3
..ZYGNEMATALES						
...DESMIDIACEAE						
....STAURASTRUM	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	52	4
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	26	2
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	52#	50	140	11
...NAVICULACEAE						
....NAVICULA	13	5	--	-	26	2
...NITZSCHIACEAE						
....NITZSCHIA	--	-	--	-	26	2
...TABELLARIACEAE						
....TABELLARIA	--	-	--	-	--	-
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...MALLOMONADACEAE						
....MALLOMONAS	--	-	--	-	--	-
...SYNURACEAE						
....SYNURA	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	13	5	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	26	10	--	-	260#	20
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	100#	40	--	-	--	-
...OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	370#	29
....OSCILLATORIA	--	-	--	-	350#	27
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°47'54", long 74°15'02", Ocean County, Hydrologic Unit 02040301, on left bank 100 ft (30 m) upstream from bridge on State Highway 532, 1.5 mi (2.4 km) downstream from reservoir at Wells Mill, and 3.2 mi (5.1 km) northeast of Brookville.

DRAINAGE AREA.--7.43 mi² (19.24 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 24.74 ft (7.541 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, Jan. 30 to Mar. 6, which are poor. Flow probably contains considerable ground-water inflow from other surface drainage basins. Some minor regulation possible from small reservoirs and cranberry bogs upstream.

AVERAGE DISCHARGE.--15 years, 29.3 ft³/s (0.830 m³/s), 53.55 in/yr (1,360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284 ft³/s (8.04 m³/s) July 4, 1978, gage height, 7.93 ft (2.417 m); minimum, 6.8 ft³/s (0.19 m³/s) Aug. 13, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft³/s (2.12 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	0015	78	2.21	5.21	1.588	May 1	1515	75	2.12	5.16	1.573
Apr. 10	0715	*168	4.76	6.13	1.868						

Minimum discharge, 6.8 ft³/s (0.19 m³/s) Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	28	28	29	29	29	69	70	29	23	20	25
2	54	28	28	28	29	27	54	62	29	17	19	24
3	40	33	28	28	30	28	41	47	29	17	17	25
4	34	38	28	28	29	27	48	42	31	18	16	24
5	32	34	28	28	28	27	63	39	29	16	13	24
6	45	30	28	28	28	27	46	36	28	14	11	23
7	41	29	33	28	28	28	40	34	29	12	10	22
8	35	28	32	29	28	28	37	34	31	11	11	21
9	32	28	29	29	28	28	49	35	27	11	38	20
10	37	28	28	28	29	28	130	34	26	12	21	20
11	54	30	28	29	30	35	71	32	26	12	11	19
12	46	44	28	45	29	33	51	32	24	11	20	20
13	41	44	28	46	28	30	45	34	23	11	18	20
14	44	38	31	38	28	56	44	35	22	15	12	21
15	40	34	30	35	27	49	48	35	22	23	8.4	25
16	36	31	29	33	28	35	45	35	23	20	7.3	22
17	34	30	29	32	29	32	41	34	23	14	18	21
18	36	29	28	31	32	37	40	36	21	17	19	22
19	37	29	28	31	32	36	39	40	19	16	21	22
20	36	28	29	32	30	35	38	38	18	20	20	21
21	35	28	30	32	29	38	38	41	17	24	20	21
22	31	28	30	31	29	50	37	44	18	16	21	21
23	29	28	32	31	30	43	37	36	17	14	22	20
24	29	28	34	32	34	36	37	33	17	14	17	20
25	28	28	36	31	37	55	37	32	19	12	16	22
26	23	31	39	31	35	54	37	31	18	13	23	24
27	28	37	35	30	33	40	38	29	18	18	22	21
28	29	34	32	30	30	35	55	29	19	17	23	22
29	28	31	31	29	29	40	66	28	21	18	25	23
30	28	29	30	29	---	57	53	28	30	19	24	21
31	28	---	30	29	---	51	---	29	---	19	24	---
TOTAL	1147	943	937	970	865	1154	1474	1144	703	494	567.7	656
MEAN	37.0	31.4	30.2	31.3	29.8	37.2	49.1	36.9	23.4	15.9	18.3	21.9
MAX	72	44	39	46	37	57	130	70	31	24	38	22
MIN	23	28	28	27	27	37	28	17	11	7.3	19	
CFSM	4.98	4.23	4.07	4.21	4.01	5.01	6.61	4.97	3.15	2.14	2.46	2.95
IN.	5.74	4.72	4.69	4.86	4.33	5.78	7.38	5.73	3.52	2.47	2.84	3.28

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CAL YR 1979  TOTAL  13503.0   MEAN 37.0   MAX 158   MIN 20    CFSM 4.98   IN 67.60
WTR YR 1980  TOTAL  11054.7   MEAN 30.2   MAX 130   MIN  7.3  CFSM 4.07   IN 55.34
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01409280 WESTECUNK CREEK AT STAFFORD FORGE, NJ

LOCATION.--Lat 39°40'00", long 74°19'12", Ocean County, Hydrologic Unit 02040301, 30 ft (9 m) downstream from dam, 0.2 mi (0.3 km) south of Stafford Forge, 1.2 mi (1.9 km) downstream from Log Swamp Branch, and 2.0 mi (3.2 km) west of Staffordville.

DRAINAGE AREA.--16.0 mi² (41.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year. Occasional low-flow measurements, water years 1969-73, at site 500 ft (150 m) downstream.

GAGE.--Water-stage recorder and wooden control. Datum of gage is 15.78 ft (4.810 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, Oct. 4 to Nov. 18, which are poor.

AVERAGE DISCHARGE.--7 years, 35.3 ft³/s (1.000 m³/s), 29.96 in/yr (761 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 256 ft³/s (7.25 m³/s) July 4, 1978, gage height, 3.70 ft (1.128 m); no flow part of May 17, 1974, Sept. 7, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft³/s (2.04 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 1	1945	93	2.63	2.88	0.878
Apr. 10	1630	141	3.99	3.16	0.963
May 1	1800	96	2.72	2.91	0.887
July 24	1830	125	3.54	2.76	0.841
Sept. 7	1130	*155	4.39	3.03	0.924

Minimum discharge, 5.4 ft³/s (0.15 m³/s) Feb. 29, Mar. 1, gage height, 1.87 ft (0.570 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	31	31	33	31	24	87	88	34	37	21	23
2	38	31	31	33	30	26	81	85	32	32	22	26
3	36	32	31	31	30	26	65	66	33	31	24	23
4	35	35	31	31	29	25	67	58	37	31	26	20
5	34	37	30	34	28	25	77	54	37	30	24	21
6	40	34	31	31	27	25	68	51	36	29	23	25
7	45	32	37	32	28	24	60	49	36	29	23	33
8	40	32	35	32	29	25	55	52	46	29	23	22
9	36	31	35	32	29	26	62	52	51	29	22	20
10	37	31	35	32	30	25	125	47	47	29	22	18
11	43	35	33	33	30	31	107	46	43	30	22	19
12	54	47	32	43	30	30	75	43	39	29	25	18
13	45	43	33	60	29	30	63	43	36	28	24	18
14	41	40	35	42	29	44	60	40	35	28	22	20
15	45	37	34	36	30	46	61	39	35	27	22	24
16	39	35	33	35	37	38	58	39	38	28	22	18
17	36	34	35	34	44	39	54	38	37	32	22	18
18	34	33	36	34	35	58	51	41	35	32	21	18
19	37	35	38	34	31	57	50	44	34	30	21	18
20	37	34	41	34	28	51	48	43	33	29	21	18
21	36	33	40	34	27	53	47	44	31	28	20	18
22	35	32	40	34	30	59	45	44	31	28	20	18
23	34	31	41	34	30	56	45	42	30	29	19	18
24	33	31	40	34	30	50	45	40	30	61	19	18
25	33	31	44	33	27	63	45	37	30	65	19	19
26	33	33	44	32	28	65	45	36	30	43	19	20
27	32	36	39	31	28	57	47	35	30	21	19	20
28	32	34	37	31	26	52	58	34	29	22	19	19
29	32	34	36	31	22	56	63	34	31	22	19	19
30	31	33	35	31	---	64	65	34	41	25	19	19
31	30	---	34	31	---	68	---	34	---	24	21	---
TOTAL	1155	1027	1107	1062	862	1318	1879	1432	1067	967	665	608
MEAN	37.3	34.2	35.7	34.3	29.7	42.5	62.6	46.2	35.6	31.2	21.5	20.3
MAX	54	47	44	60	44	68	125	88	51	65	26	33
MIN	30	31	30	31	22	24	45	34	29	21	19	18
CFSM	2.33	2.14	2.23	2.14	1.86	2.66	3.91	2.89	2.23	1.95	1.34	1.27
IN.	2.69	2.39	2.57	2.47	2.00	3.06	4.37	3.33	2.48	2.25	1.55	1.41

CAL YR 1979 TOTAL 16141 MEAN 44.2 MAX 218 MIN 22 CFSM 2.76 IN 37.53
WTR YR 1980 TOTAL 13149 MEAN 35.9 MAX 125 MIN 18 CFSM 2.24 IN 30.57

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi (0.3 km) upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi² (69.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
10...	1030	--	34	4.5	13.5	9.7	1.0	<20	2	6
FEB										
20...	1230	9.2	46	4.9	4.0	12.8	E1.3	<20	<2	8
APR										
01...	1215	142	52	4.4	7.0	11.0	.7	<20	5	5
MAY										
28...	1300	32	44	4.6	20.0	8.4	1.2	20	14	5
JUL										
10...	1200	20	37	5.0	22.0	7.7	E.2	50	<2	7
AUG										
12...	0930	16	32	5.5	27.0	6.9	1.7	110	>2400	6
SEP										
24...	1330	12	35	4.8	21.0	7.2	<.9	<20	8	6

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
10...	1.3	.6	2.4	.7	0	.0	3.4	5.3	.0
FEB									
20...	1.8	.8	3.1	.8	2	--	7.3	4.6	.1
APR									
01...	1.0	.7	2.1	.8	0	--	7.0	3.6	.1
MAY									
28...	1.1	.6	3.1	.5	2	.4	4.2	3.9	.1
JUL									
10...	1.6	.7	1.8	.6	2	--	5.1	3.8	.0
AUG									
12...	1.4	.7	2.1	.7	5	--	5.1	3.6	.1
SEP									
24...	1.3	.6	2.0	.5	3	--	4.7	3.0	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	4.0	37	<1.0	.550	.65	1.2	--	<.01	6.4
FEB									
20...	4.7	28	.50	.360	.63	.99	1.5	.10	2.8
APR									
01...	2.2	40	.04	.050	.11	.16	.20	<.01	5.6
MAY									
28...	3.1	24	.37	.090	.17	.26	.63	<.03	8.3
JUL									
10...	4.5	--	.15	.210	.89	1.1	1.2	.08	13
AUG									
12...	4.4	30	.14	.300	1.0	1.3	1.4	.18	11
SEP									
24...	2.9	19	.15	.110	.58	.69	.84	.06	6.3

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
10...	1030	140	1	0	230	0	20	3
MAY								
28...	1300	140	1	0	40	0	10	8

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
10...	1300	18	10	.3	0	0	20	0
MAY								
28...	1800	14	20	<.1	2	0	60	3

01409400 MULLICA RIVER NEAR BATSTO, NJ

LOCATION.--Lat 39°40'28", long 74°39'55", Atlantic County, Hydrologic Unit 02040301, on right bank 2.4 mi (3.9 km) upstream from Sleeper Branch, and 2.5 mi (4.0 km) north of Batsto.

DRAINAGE AREA.--46.1 mi^2 (119.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1957 to current year.

REVISED RECORDS.--WRD-NJ 1969: 1958(M), 1960(M), 1967-68(M).

GAGE.--Water-stage recorder. Datum of gage is 11.93 ft (3.636 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation from upstream cranberry bogs and Atsion Lake. Diversions from Sleeper Branch enter river upstream of gage.

AVERAGE DISCHARGE.--23 years, 113 ft^3/s (3.200 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft^3/s (52.1 m^3/s) Feb. 26, 1975, gage height, 6.14 ft (1.871 m); minimum, 7.0 ft^3/s (0.20 m^3/s) Sept. 6-8, 1966, gage height, 0.28 ft (0.085 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 380 ft^3/s (10.8 m^3/s) Apr. 11, gage height, 3.43 ft (1.045 m); minimum daily, 15 ft^3/s (0.42 m^3/s) Sept. 24, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	74	110	98	99	79	364	223	73	65	90	23
2	84	73	103	98	93	77	344	240	70	61	73	22
3	90	87	96	98	86	77	318	238	70	62	53	24
4	103	100	91	90	82	76	330	231	77	65	51	24
5	110	105	95	77	79	81	359	213	72	59	47	22
6	95	111	101	78	75	81	338	195	69	55	37	22
7	107	119	109	81	75	79	279	175	69	49	33	22
8	102	120	108	83	75	82	229	150	80	47	33	21
9	96	113	104	84	77	83	219	133	87	47	31	20
10	111	111	98	83	78	85	346	128	90	48	29	20
11	155	114	75	103	80	98	363	122	66	47	26	19
12	193	137	61	151	75	96	369	127	65	43	43	18
13	204	164	75	154	64	97	318	139	65	39	36	20
14	230	193	92	164	60	142	264	132	64	38	34	17
15	223	177	98	215	60	169	248	123	63	37	32	17
16	191	161	108	208	70	198	221	114	71	35	31	17
17	172	132	104	174	69	163	198	89	67	35	29	17
18	149	124	94	143	68	144	180	99	65	39	29	22
19	112	118	91	135	68	140	165	107	62	40	29	21
20	118	100	89	132	69	136	152	103	59	36	29	19
21	124	82	87	130	69	154	141	108	56	34	29	18
22	112	86	89	148	74	218	132	119	54	33	29	17
23	98	88	97	158	83	234	110	126	50	38	29	16
24	91	88	99	144	83	228	75	137	48	38	27	15
25	85	86	104	139	84	300	71	125	47	36	26	22
26	82	99	110	132	88	325	85	112	46	33	26	21
27	79	115	109	126	92	287	106	86	45	31	25	20
28	76	125	106	122	89	237	120	75	43	28	24	16
29	75	119	103	116	85	230	141	77	46	43	24	15
30	74	114	101	108	---	254	168	75	73	62	24	15
31	74	---	100	103	---	288	---	74	---	87	24	---
TOTAL	3692	3435	3007	3875	2249	4938	6753	4195	1912	1410	1082	582
MEAN	119	115	97.0	125	77.6	159	225	135	63.7	45.5	34.9	19.4
MAX	230	193	110	215	99	325	369	240	90	87	90	24
MIN	74	73	61	77	60	76	71	74	43	28	24	15

CAL YR 1979 TOTAL 58527 MEAN 160 MAX 1630 MIN 47
WTR YR 1980 TOTAL 37130 MEAN 101 MAX 369 MIN 15

393825074393500 MULLICA RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°38'25", long 74°39'35", Burlington County, Hydrologic Unit 02040301, at bridge at Pleasant Mills, 0.3 mi (0.5 km) upstream from confluence with outflow from Nescochague Lake, and 0.6 mi (1.0 km) southwest of Batsto.

DRAINAGE AREA.--127 mi² (329 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	STREP- TOCOCCI FECAL (MPN)	HARD- NESS (MG/L AS CACO3)
OCT 10...	1220	48	4.8	11.5	9.0	1.0	210	350	10
FEB 06...	1130	51	5.1	.0	14.8	<.8	<20	2	12
MAR 26...	1130	63	--	6.0	11.0	1.2	<20	7	9
MAY 28...	1100	52	5.3	16.5	8.1	.9	<20	540	10
JUL 10...	1000	44	5.5	21.0	7.7	E.3	50	240	9
AUG 12...	1245	47	5.8	23.5	6.9	1.8	1600	>2400	9
SEP 24...	1050	46	5.6	18.5	7.5	<1.1	<20	48	8

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 10...	2.2	1.0	3.0	1.5	0	--	7.1	6.1	.1
FEB 06...	2.5	1.3	3.4	1.3	2	--	10	6.1	.0
MAR 26...	2.0	.9	2.8	1.1	1	--	10	4.4	.1
MAY 28...	2.0	1.1	4.1	.9	3	.3	6.4	5.5	.1
JUL 10...	1.8	1.0	3.4	.9	5	--	6.8	5.3	.1
AUG 12...	1.9	1.1	2.7	1.2	2	--	8.4	4.5	.1
SEP 24...	1.8	.8	3.0	1.0	6	--	5.8	5.2	.0

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	4.6	36	--	.340	1.3	1.7	--	.04	7.9
FEB 06...	5.0	39	.56	.140	.49	.63	1.2	<.01	6.3
MAR 26...	2.6	38	.20	.120	.12	.24	.44	<.01	8.9
MAY 28...	3.8	36	.22	.070	.19	.26	.48	<.03	8.7
JUL 10...	4.7	--	.23	.120	.65	.77	1.0	.14	9.0
AUG 12...	5.5	37	.25	.380	.34	.72	.97	.25	10
SEP 24...	4.6	27	.15	.130	.40	.53	.68	.09	7.7

393825074393500 MULLICA RIVER AT PLEASANT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
10...	1220	700	.1	2.5	--	--	1	--	--	--	<10
MAY											
28...	1100	--	--	--	90	1	--	0	50	0	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
10...	--	<10	<10	--	<10	--	8700	--	<10	--
MAY										
28...	10	--	--	3	--	2800	--	7	--	20

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
10...	<10	--	.00	--	<10	--	0	--	10	--
MAY										
28...	--	.1	--	4	--	0	--	20	--	5

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
10...	2	.0	1	.7	.3	1.2	.0	.0	.0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
10...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road in Wescoatville, 1.1 mi (1.8 km) southwest of Nesco, 1.7 mi (2.7 km) upstream from Norton Branch, and 3.8 mi (6.1 km) southwest of Batsto.

DRAINAGE AREA.--9.60 mi² (24.86 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB										
05...	1100	12	128	6.4	2.5	6.5	4.9	<2	2	18
MAR										
24...	1100	83	123	6.1	8.0	6.3	1.6	<2	2	24
MAY										
20...	1100	33	125	6.4	18.5	2.2	--	80	1300	19
JUL										
08...	1200	36	115	6.4	21.0	1.5	4.8	50	7	15
SEP										
02...	1130	14	145	6.6	23.5	1.5	4.6	40	80	18

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB										
05...	4.3	1.8	12	2.8	10	0	8	14	12	.2
MAR										
24...	5.8	2.2	7.6	3.2	17	0	14	18	10	.2
MAY										
20...	4.3	1.9	11	2.6	24	0	20	12	11	.1
JUL										
08...	3.5	1.6	12	2.7	17	0	14	10	12	.3
SEP										
02...	4.4	1.8	13	3.4	20	0	16	11	15	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
05...	7.9	69	2.1	E2.300	--	2.5	4.6	2.0	18
MAR									
24...	6.1	67	1.6	2.300	3.2	5.5	7.1	1.6	4.6
MAY									
20...	6.2	76	1.2	2.600	7.0	9.6	11	2.5	4.5
JUL									
08...	6.2	68	.90	1.300	2.0	3.3	4.2	2.8	7.1
SEP									
02...	8.7	92	1.8	.880	1.1	2.0	3.8	3.0	8.7

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'00", Burlington County, Hydrologic Unit 02040301, on right bank 30 ft (9 m) downstream from bridge on State Highway 542 at Batsto, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--70.5 mi^2 (182.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for April to September 1939, published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1930, 1933, 1936, 1938.

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1939; prior to Mar. 24, 1939, wooden control at site 50 ft (15 m) downstream. Datum of gage is 1.4 ft (0.43 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Oct. 1 to Nov. 27, which are fair. Considerable regulation at times by sluice gates prior to December 1954 and by automatic Bascule and sluice gates since July 1959 at Batsto Lake, 300 ft (91 m) upstream, capacity, about 60,000,000 gal (227,000 m^3).

AVERAGE DISCHARGE.--53 years, 126 ft^3/s (3.568 m^3/s), 24.27 in/yr (616 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,310 ft^3/s (37.1 m^3/s) Aug. 24, 1933; maximum gage height, 8.7 ft (2.65 m) Aug. 20, 1939, from floodmark; minimum daily discharge, 5.7 ft^3/s (0.16 m^3/s) Oct. 4, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 443 ft^3/s (12.5 m^3/s) Apr. 11, maximum gage height, 3.96 ft (1.207 m) Apr. 11; minimum daily discharge, 49 ft^3/s (1.39 m^3/s) many days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	90	136	110	107	96	334	192	88	91	134	53
2	136	89	128	109	102	94	363	232	89	79	120	51
3	136	107	119	106	98	92	325	234	88	77	102	55
4	133	121	115	107	96	92	297	203	98	88	95	54
5	132	124	113	107	94	94	284	180	95	83	90	52
6	125	123	115	105	94	97	285	165	91	76	77	52
7	132	122	123	102	94	99	250	163	90	71	73	52
8	124	120	126	103	94	100	218	154	103	68	74	50
9	114	112	123	103	94	103	221	146	100	68	71	50
10	132	110	118	102	94	106	305	145	99	72	68	49
11	177	116	115	104	95	115	443	132	99	72	66	49
12	203	152	112	143	95	125	413	137	93	69	89	49
13	207	172	110	178	94	180	327	137	90	65	79	49
14	225	187	121	205	92	156	273	130	88	62	69	49
15	216	175	127	189	92	180	252	123	84	61	65	49
16	185	159	125	174	100	209	221	115	95	61	65	49
17	168	139	121	156	106	198	204	109	91	62	62	49
18	152	129	116	143	107	187	189	111	88	67	61	55
19	128	121	110	141	100	167	175	116	82	68	61	56
20	127	110	105	153	98	198	165	124	80	64	62	53
21	128	99	107	155	98	115	153	131	78	62	61	51
22	118	103	113	148	101	157	146	138	75	62	61	50
23	106	103	120	148	110	241	137	137	72	69	59	50
24	98	96	128	148	116	255	131	130	72	70	56	49
25	93	95	140	142	118	287	128	123	72	67	57	58
26	91	108	140	134	116	299	126	116	70	65	57	57
27	89	126	141	127	111	317	130	106	70	61	56	54
28	87	134	132	123	109	245	141	100	69	59	54	50
29	86	152	124	119	102	238	154	95	71	80	54	49
30	88	145	116	115	---	230	165	94	97	106	54	49
31	89	---	113	112	---	284	---	90	---	133	54	---
TOTAL	4162	3739	3752	4111	2927	5356	6955	4308	2577	2258	2206	1542
MEAN	134	125	121	133	101	173	232	139	85.9	72.8	71.2	51.4
MAX	225	187	141	205	118	317	443	234	103	133	134	58
MIN	86	89	105	102	92	92	126	90	69	59	54	49
CFSM	1.90	1.77	1.72	1.89	1.43	2.45	3.29	1.97	1.22	1.03	1.01	.73
IN.	2.20	1.97	1.98	2.17	1.54	2.83	3.67	2.27	1.36	1.19	1.16	.81

CAL YR 1979 TOTAL 63586 MEAN 174 MAX 1100 MIN 71 CFSM 2.47 IN 33.55
WTR YR 1980 TOTAL 43893 MEAN 120 MAX 443 MIN 49 CFSM 1.70 IN 23.16

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
10...	1320	E132	31	5.0	12.0	9.8	1.0	<20	8	6
JAN										
24...	1100	148	58	4.6	1.0	13.4	2.0	20	<2	9
MAR										
26...	1030	303	62	4.4	6.0	10.8	<.1	80	49	9
MAY										
28...	0915	103	39	5.4	17.0	8.1	.8	<20	23	8
JUL										
10...	1100	72	29	5.5	21.0	8.0	E.1	70	9	5
AUG										
12...	1330	92	31	6.2	24.0	7.5	.8	130	>2400	7
SEP										
24...	0930	49	25	5.4	18.5	7.8	<.5	<20	220	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
10...	1.3	.7	2.3	.3	0	--	4.3	4.2	.0
JAN									
24...	2.1	.8	2.3	.9	2	--	8.8	4.2	.0
MAR									
26...	2.1	1.0	2.3	.8	0	--	9.2	4.0	.0
MAY									
28...	1.8	.9	3.1	.6	2	.0	5.2	4.4	.0
JUL									
10...	1.0	.5	1.9	.4	4	--	3.7	3.4	.0
AUG									
12...	1.5	.8	2.4	.7	4	--	4.9	4.2	.1
SEP									
24...	.9	.4	2.1	.6	3	.0	3.0	3.1	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	5.0	27	<1.0	.340	.32	.66	--	<.01	4.6
JAN									
24...	4.1	28	.24	.140	.58	.72	.96	<.01	8.3
MAR									
26...	3.1	34	.16	.170	.69	.86	1.0	<.01	7.3
MAY									
28...	4.4	34	<.05	.070	.26	.33	--	<.03	6.7
JUL									
10...	4.3	--	.05	.120	.42	.54	.59	.06	4.2
AUG									
12...	5.2	38	<.05	.220	.27	.49	--	.12	5.6
SEP									
24...	5.2	15	<.05	.120	.17	.29	--	.03	4.9

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
28...	0915	120	1	0	40	0	10	3
SEP								
24...	0930	20	1	0	20	0	10	3

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
28...	2000	20	20	.1	2	0	60	7
SEP								
24...	1200	13	20	<.1	2	0	60	6

01409510 BATSTO RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°37'55", long 74°38'40", Burlington County, Hydrologic Unit 02040301, on right bank, 0.5 mi (1.6 km) southeast of Pleasant Mills.

DRAINAGE AREA.--73.6 mi² (190.6 km²).

PERIOD OF DAILY RECORD.--July 1958 to current year. Annual maximum only published for 1958 to 1965.

GAGE.--Water-stage recorder. Datum of gage is -8.6 ft (-2.62 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 7.2 ft (2.19 m) Mar. 7, 1962; minimum (1967-79), -0.40 ft (-0.122 m) Oct 18, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 4.15 ft (1.265 m) Jan. 17; minimum, -0.02 ft (-0.006 m) July 14.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.10	3.36	3.71	4.15	3.24	3.55	3.77	3.37	3.04	--	--	--
high tide	Date	11	26	20	17	16	31	1	3	30	--	--	--
Minimum	Elevation	0.31	0.46	0.34	0.34	0.03	0.07	0.52	0.22	0.01	-0.02	--	--
low tide	Date	9	25	18,19,30	4	15	6	22,23,26	28	25	14	--	--
Mean high tide		--	2.56	2.32	2.53	2.33	2.15	2.77	2.66	2.45	--	--	--
Mean water level		--	1.61	1.33	1.65	1.28	1.44	1.98	1.67	1.30	--	--	--
Mean low tide		--	0.72	--	0.87	0.34	0.70	1.18	0.63	0.22	--	--	--

NOTE.--Missing on doubtful record or Oct. 1-8, July 16 to Aug. 18, Aug. 23 to Sept. 30.

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ

LOCATION.--Lat 39°41'17", long 74°32'54", Burlington County, Hydrologic Unit 02040301, on right bank 900 ft (274 m) downstream from Godfrey Bridge, 2.2 mi (3.5 km) downstream from Little Hospitality Brook, and 1.2 mi (1.9 km) southwest of Jenkins.

DRAINAGE AREA.--84.1 mi² (217.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR NJ-77-1: 1976.

GAGE.--Water-stage recorder. Datum of gage is 29.09 ft (8.87 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation by cranberry bogs and small ponds.

AVERAGE DISCHARGE.--6 years, 166 ft³/s (4.701 m³/s), 26.80 in/yr (681 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) Feb. 26, 1979, gage height, 16.14 ft (4.919 m); minimum, 22 ft³/s (0.62 m³/s) July 24, 1977, gage height 10.16 ft (3.097 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 622 ft³/s (17.6 m³/s) Mar. 27, gage height, 14.24 ft (4.340 m); minimum, 32 ft³/s (0.91 m³/s) Sept. 12, gage height, 10.19 ft (3.106 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	97	113	116	114	96	588	373	78	98	161	41
2	168	103	99	113	111	100	573	403	76	80	112	41
3	180	151	87	109	109	101	464	358	76	70	85	43
4	146	195	77	108	105	101	441	315	88	85	80	43
5	129	187	75	119	102	108	507	259	79	79	70	42
6	165	175	74	120	101	131	434	203	76	75	65	42
7	146	143	94	121	102	118	358	162	89	67	62	40
8	119	128	90	128	101	107	287	152	95	63	58	37
9	116	120	83	126	101	124	302	146	90	61	55	36
10	187	121	77	121	103	142	519	149	87	60	53	36
11	288	147	79	130	109	156	563	230	83	60	52	35
12	294	253	81	283	104	140	538	276	86	57	91	33
13	278	277	91	281	99	178	435	294	109	55	89	34
14	329	263	105	228	97	238	348	215	104	53	70	35
15	299	233	97	224	97	285	351	154	95	52	64	36
16	220	189	93	215	115	248	306	111	114	50	61	36
17	212	169	98	195	124	214	228	133	110	51	56	38
18	195	160	102	179	113	267	192	165	93	56	54	45
19	174	150	99	213	108	254	188	158	83	57	55	41
20	168	139	106	203	107	205	219	155	76	52	55	48
21	153	130	109	181	107	224	159	166	71	49	54	48
22	152	120	115	170	114	336	127	174	63	53	53	42
23	144	117	133	199	128	342	128	146	60	71	52	38
24	127	112	141	178	125	328	147	127	58	68	50	35
25	116	112	157	164	122	418	152	116	56	59	48	41
26	104	141	167	154	122	513	130	103	56	54	46	58
27	98	202	153	146	113	506	139	80	57	50	44	52
28	123	190	137	141	108	341	175	90	56	49	46	53
29	138	160	129	135	103	369	201	136	61	93	46	58
30	105	113	124	127	---	464	231	93	125	255	42	51
31	89	---	119	122	---	487	---	88	---	236	42	---
TOTAL	5309	4797	3304	5049	3164	7641	9430	5730	2450	2318	1971	1258
MEAN	171	160	107	163	109	246	314	185	81.7	74.8	63.6	41.9
MAX	329	277	167	283	128	513	588	403	125	255	161	58
MIN	89	97	74	108	97	96	127	80	56	49	42	33
CFSM	2.03	1.90	1.27	1.94	1.30	2.93	3.73	2.20	.97	.89	.76	.50
IN.	2.35	2.12	1.46	2.23	1.40	3.38	4.17	2.53	1.08	1.03	.87	.56

CAL YR 1979 TOTAL 79197 MEAN 217 MAX 1260 MIN 67 CFSM 2.58 IN 35.03
WTR YR 1980 TOTAL 52421 MEAN 143 MAX 588 MIN 33 CFSM 1.70 IN 23.19

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1978 to current year.
WATER TEMPERATURES: May 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1978.

REMARKS.--Missing continuous water-quality records are the result of malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 27°C July 23, 1978, July 26, 27, 1979; minimum, 0.0°C on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 26.5°C July 21, Aug. 3; minimum, 1.0°C on several days during winter months.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	5.0	4.0	4.5	4.5	2.5	3.5
2				---	---	---	4.5	3.5	4.0	4.5	4.0	4.0
3				---	---	---	4.0	3.0	3.5	4.0	3.5	4.0
4				---	---	---	5.0	3.0	4.0	3.0	2.5	2.5
5				---	---	---	5.5	3.5	4.5	2.0	1.5	2.0
6				---	---	---	---	---	---	2.0	1.5	2.0
7				---	---	---	---	---	---	2.5	1.0	2.0
8				---	---	---	---	---	---	3.5	2.5	3.0
9				---	---	---	---	---	---	3.0	2.0	2.5
10				---	---	---	---	---	---	2.0	1.0	1.5
11				---	---	---	---	---	---	2.5	1.5	---
12				---	---	---	---	---	---	---	---	---
13				---	---	---	---	---	---	---	---	---
14				---	---	---	---	---	---	---	---	---
15				---	---	---	---	---	---	6.0	2.5	5.0
16				---	---	---	---	---	---	4.5	1.0	2.5
17				---	---	---	---	---	---	3.0	1.5	2.0
18				---	---	---	---	---	---	6.0	3.0	5.0
19				---	---	---	2.0	1.0	---	7.0	5.0	6.0
20				---	---	---	2.5	1.5	2.0	6.0	4.0	4.5
21				---	---	---	3.5	2.0	3.0	5.0	4.5	4.5
22				---	---	---	5.0	3.5	4.0	5.5	5.0	5.5
23				---	---	---	6.0	4.5	5.0	6.0	4.0	5.0
24				---	---	---	7.0	5.5	6.0	5.0	2.5	4.0
25				---	---	---	9.5	7.0	8.5	3.5	2.0	2.5
26				---	---	---	8.5	7.0	7.5	4.0	2.5	3.5
27				14.0	11.0	12.5	6.5	5.0	5.5	4.5	1.0	3.0
28				11.5	10.0	11.0	5.0	4.0	4.5	2.0	1.0	1.5
29				10.5	7.0	9.0	5.5	4.0	4.5	2.5	1.5	---
30				6.5	5.0	6.0	5.5	4.0	5.0	---	---	---
31				---	---	---	4.5	3.5	4.0	---	---	---
MONTH				14.0	5.0	9.5	9.5	1.0	4.5	7.0	1.0	3.5

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, N.J.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	3.0	1.0	2.0	9.5	6.0	7.5	12.5	11.5	12.0
2	---	---	---	2.5	1.0	2.0	10.5	7.0	9.0	16.0	11.5	13.5
3	---	---	---	3.5	1.0	2.0	12.5	8.5	10.5	18.0	13.0	15.5
4	---	---	---	4.5	1.5	3.0	12.5	11.5	11.5	19.5	15.5	17.5
5	---	---	---	6.0	4.0	5.0	12.0	10.5	11.0	20.0	15.5	18.0
6	---	---	---	7.0	4.5	5.5	13.5	9.0	11.0	21.0	17.5	19.5
7	---	---	---	8.0	4.5	6.0	14.0	10.5	12.5	21.0	18.0	19.5
8	---	---	---	10.5	7.5	9.0	15.5	12.0	13.5	19.0	15.0	17.0
9	---	---	---	11.0	9.0	10.0	14.0	13.0	13.5	16.0	13.0	14.5
10	---	---	---	10.5	7.0	8.5	16.0	12.5	14.0	17.0	12.5	15.0
11	---	---	---	9.5	7.0	8.5	16.5	13.5	15.0	17.5	15.0	16.5
12	---	---	---	6.5	5.0	6.0	16.0	13.5	15.0	19.0	16.5	17.5
13	4.0	2.5	---	5.5	4.0	4.5	18.0	15.0	16.5	21.5	18.0	19.5
14	5.0	2.5	4.0	3.5	4.0	4.0	16.5	13.5	14.5	21.0	19.0	20.0
15	5.5	3.5	4.5	5.5	2.0	4.0	16.5	13.5	15.0	19.5	17.0	18.0
16	5.0	4.0	5.0	6.5	3.0	4.5	14.5	10.5	12.5	18.5	15.0	17.0
17	3.5	2.0	3.0	9.0	5.5	7.0	12.0	8.0	10.0	18.5	15.0	17.0
18	3.5	1.5	3.0	11.0	9.0	10.0	13.5	9.5	11.5	18.0	16.5	17.0
19	4.5	2.0	3.5	9.5	7.5	8.5	15.5	10.5	13.0	19.5	16.0	18.0
20	6.0	3.0	4.5	10.0	8.0	9.0	16.0	12.5	14.5	19.0	18.0	18.5
21	7.5	4.5	6.0	10.5	9.5	10.0	18.0	14.0	15.5	18.0	16.5	17.0
22	6.5	6.0	6.0	9.5	6.0	7.5	16.5	12.5	14.5	20.0	15.5	17.5
23	8.5	6.0	7.0	8.5	4.5	6.5	16.0	11.5	14.0	21.5	18.0	20.0
24	8.5	7.5	8.0	8.0	6.5	7.0	17.0	12.5	15.0	21.5	19.5	20.5
25	7.5	6.0	6.5	7.5	7.0	7.0	18.0	15.0	16.5	22.0	19.5	21.0
26	6.0	4.0	5.0	8.0	6.0	7.0	16.0	13.5	15.0	20.5	18.0	19.5
27	4.5	2.5	3.5	9.0	6.5	8.0	13.5	13.0	13.0	19.0	15.5	17.5
28	4.0	2.5	3.5	9.0	6.5	8.0	13.0	12.5	12.5	18.5	15.0	17.0
29	3.5	2.0	2.5	9.0	8.5	7.5	13.0	12.0	12.5	20.0	17.5	18.5
30	---	---	---	10.5	9.0	9.5	12.5	12.0	12.5	19.0	17.0	18.0
31	---	---	---	10.0	7.0	8.5	---	---	---	19.5	17.0	18.5
MONTH	8.5	1.5	4.5	11.0	1.0	6.5	18.0	6.0	13.0	22.0	11.5	17.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	18.0	20.0	21.5	19.0	20.5	26.0	23.5	24.5	24.0	21.0	22.5
2	22.5	20.0	21.5	23.0	19.0	21.0	26.0	23.0	24.5	24.5	21.5	23.0
3	22.5	20.0	21.0	22.5	20.5	21.0	26.5	23.5	25.0	24.0	21.5	22.5
4	21.0	18.5	19.5	24.0	20.0	22.0	26.0	23.0	24.5	22.5	19.5	21.0
5	20.0	17.0	18.5	24.0	21.0	22.5	26.5	23.5	25.0	21.5	19.5	20.5
6	19.0	16.0	17.5	24.0	21.5	22.5	26.0	23.5	25.0	22.5	19.5	21.0
7	21.0	17.5	19.0	22.0	19.0	20.5	25.0	22.5	24.0	22.5	20.0	21.0
8	21.5	19.0	20.0	21.0	19.0	20.0	25.0	22.0	23.5	20.5	17.5	19.0
9	19.0	16.0	17.5	23.0	19.0	21.0	25.5	23.0	24.0	20.0	17.0	18.5
10	17.0	15.5	16.0	22.5	20.5	21.5	24.5	22.0	23.5	20.5	18.5	19.0
11	17.5	13.5	15.5	23.5	20.5	22.0	24.5	21.5	23.0	---	---	---
12	18.0	14.0	16.0	24.0	21.0	22.5	24.0	22.0	23.0	---	---	---
13	19.0	15.0	17.0	22.5	19.0	21.0	24.0	21.5	23.0	---	---	---
14	19.0	15.5	17.5	23.0	19.0	21.0	23.0	20.5	22.0	---	---	---
15	20.5	17.0	18.5	23.5	19.5	21.5	22.5	21.5	22.0	---	---	---
16	19.5	17.5	18.5	25.0	21.0	22.5	22.5	20.5	21.5	---	---	---
17	19.5	16.0	17.5	24.0	21.5	23.0	21.5	18.5	20.0	---	---	---
18	19.0	16.5	17.5	24.0	21.5	23.0	20.0	18.5	19.0	---	---	---
19	19.5	15.5	17.5	24.0	21.5	23.0	20.5	18.5	19.5	19.5	17.0	18.0
20	19.0	16.0	17.5	25.5	22.0	23.5	21.5	19.5	20.5	19.5	16.5	18.0
21	20.0	16.5	18.5	26.5	23.0	25.0	20.0	19.0	19.5	21.0	18.0	19.5
22	20.0	17.0	18.5	25.5	23.0	24.0	19.5	18.5	19.0	22.5	19.5	21.0
23	20.5	17.0	18.5	24.0	22.5	23.0	20.5	17.0	19.0	22.5	20.5	21.5
24	20.5	17.5	19.0	24.0	21.0	22.5	21.0	18.0	19.5	20.5	18.0	19.5
25	22.0	18.5	20.0	25.5	20.0	---	21.0	18.5	20.0	18.0	17.5	17.5
26	20.5	18.5	19.5	---	---	---	22.0	18.5	20.5	20.0	18.0	18.5
27	22.5	19.0	20.5	23.5	21.0	22.5	22.5	19.5	21.0	18.0	15.0	16.5
28	22.0	20.0	21.5	23.5	21.0	22.0	23.0	20.0	21.5	16.0	13.0	14.5
29	22.5	19.5	21.0	23.5	21.5	22.5	23.0	21.0	22.0	17.0	14.5	16.0
30	22.5	19.5	21.0	25.0	22.0	23.0	23.0	20.5	21.5	18.0	15.5	16.5
31	---	---	---	25.5	23.0	24.0	23.5	20.5	22.0	---	---	---
MONTH	22.5	13.5	18.5	26.5	19.0	22.0	26.5	17.0	22.0	24.5	13.0	19.5

MULLICA RIVER BASIN

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1				---	---	---	45	44	44	43	42	42
2				---	---	---	44	40	41	43	41	42
3				---	---	---	40	39	39	42	41	42
4				---	---	---	38	36	37	42	41	41
5				---	---	---	37	36	36	41	40	41
6				---	---	---	---	---	---	41	40	41
7				---	---	---	---	---	---	41	40	41
8				---	---	---	---	---	---	42	40	41
9				---	---	---	---	---	---	42	40	41
10				---	---	---	---	---	---	42	41	41
11				---	---	---	---	---	---	41	40	---
12				---	---	---	---	---	---	---	---	---
13				---	---	---	---	---	---	---	---	---
14				---	---	---	---	---	---	---	---	---
15				---	---	---	---	---	---	44	40	41
16				---	---	---	---	---	---	45	41	44
17				---	---	---	---	---	---	45	44	44
18				---	---	---	---	---	---	45	41	44
19				---	---	---	41	40	---	45	41	44
20				---	---	---	44	40	41	45	44	44
21				---	---	---	44	40	42	44	41	44
22				---	---	---	44	41	43	44	41	43
23				---	---	---	45	41	44	45	44	44
24				---	---	---	45	44	45	45	41	44
25				---	---	---	45	44	45	44	40	41
26				---	---	---	45	44	44	43	40	41
27				54	47	52	46	44	45	44	40	42
28				54	53	53	46	44	45	43	41	43
29				53	50	51	45	43	44	43	41	---
30				50	45	46	44	43	43	---	---	---
31				---	---	---	43	42	43	---	---	---
MONTH				54	45	51	46	36	42	45	40	42

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	38	37	37	50	48	49	47	44	45
2	---	---	---	37	36	36	50	49	49	47	45	46
3	---	---	---	38	36	37	50	48	49	47	45	46
4	---	---	---	39	36	37	49	48	49	47	45	46
5	---	---	---	39	37	38	50	49	49	46	44	45
6	---	---	---	39	38	39	50	48	49	46	43	45
7	---	---	---	39	38	38	50	48	49	44	42	43
8	---	---	---	39	37	38	50	47	48	43	42	43
9	---	---	---	39	38	38	49	47	48	43	40	41
10	---	---	---	39	36	38	50	48	49	44	39	41
11	---	---	---	41	37	38	51	49	50	44	41	43
12	---	---	---	41	37	38	51	49	50	43	42	43
13	40	40	---	38	37	38	50	48	49	42	41	42
14	40	38	40	46	41	43	49	47	48	42	41	42
15	40	38	39	48	46	47	48	47	47	42	40	41
16	40	40	40	48	47	47	48	46	47	41	35	39
17	40	40	40	48	45	46	47	44	45	43	39	40
18	40	40	40	47	45	46	45	43	44	43	40	42
19	39	37	39	47	45	46	46	42	44	42	40	41
20	39	37	38	47	43	46	46	43	45	42	41	41
21	39	37	38	47	43	44	44	42	43	42	40	41
22	40	38	39	48	46	47	43	41	42	41	39	41
23	40	39	40	49	47	48	44	40	42	41	39	40
24	40	39	40	49	48	49	44	41	42	40	39	40
25	40	39	39	48	46	47	44	41	43	40	38	39
26	40	38	39	49	47	48	43	41	42	40	35	38
27	40	37	39	49	48	48	42	41	41	38	35	37
28	40	37	38	49	47	48	43	41	42	41	35	38
29	39	37	38	49	47	48	43	41	42	44	42	43
30	---	---	---	50	48	49	44	42	43	41	38	39
31	---	---	---	50	49	49	---	---	---	39	35	38
MONTH	40	37	39	50	36	43	51	40	46	47	35	42

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	38	35	36	48	42	46	57	47	53	29	23	26
2	38	35	37	42	37	39	47	40	44	29	23	26
3	39	34	37	37	35	36	40	35	37	30	25	28
4	40	38	39	36	34	35	36	29	33	31	29	30
5	38	34	37	36	34	35	29	25	28	31	29	30
6	37	35	36	34	31	32	28	24	26	31	29	30
7	39	36	39	31	30	31	24	23	23	32	30	31
8	40	38	39	31	30	31	24	22	23	32	28	31
9	39	35	37	30	29	30	23	21	22	32	28	29
10	38	36	36	30	29	30	23	22	22	32	28	31
11	37	34	36	30	29	30	23	18	21	---	---	---
12	39	34	36	30	29	30	33	22	29	---	---	---
13	44	39	42	30	29	29	34	32	33	---	---	---
14	43	41	42	30	29	29	33	26	29	---	---	---
15	43	41	42	29	28	29	26	25	26	---	---	---
16	43	40	41	29	28	29	26	25	25	---	---	---
17	41	40	41	29	28	29	26	25	26	---	---	---
18	41	37	39	32	28	30	27	26	26	---	---	---
19	38	33	36	33	32	32	26	25	26	---	---	---
20	37	33	34	33	29	31	26	25	26	---	---	---
21	33	32	32	29	27	28	26	25	26	---	---	---
22	33	32	33	30	27	28	27	26	26	---	---	---
23	33	32	33	39	28	36	27	25	26	---	---	---
24	33	32	33	38	34	36	28	22	25	---	---	---
25	33	32	32	34	31	---	26	22	24	---	---	---
26	33	32	33	---	---	---	28	22	25	---	---	---
27	32	31	31	28	24	26	26	22	23	---	---	---
28	32	31	31	26	22	23	26	23	24	---	---	---
29	41	31	32	39	22	29	35	23	31	---	---	---
30	48	41	44	62	41	57	33	28	31	---	---	---
31	---	---	---	65	57	61	30	27	29	---	---	---
MONTH	48	31	37	65	22	33	57	18	28	32	23	29

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ
(National stream-quality accounting network station)

LOCATION.--Lat 39°40'30", long 74°32'28", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563 in Maxwell, 1.6 mi (2.6 km) southeast of Washington, 1.8 mi (2.9 km) southwest of Jenkins, and 2.2 mi (3.5 km) upstream from confluence with Oswego River.

DRAINAGE AREA.--85.9 mi² (222.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Water-stage recorder and water-quality monitor located at station 01409810.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 29...	1030	141	40	4.5	9.0	2.0	9.9	1.0	47	74
NOV 27...	1100	207	45	4.3	12.5	3.0	8.9	>.2	--	--
DEC 06...	1100	72	36	4.5	5.5	2.0	11.2	1.0	--	44
JAN 29...	1100	134	41	4.5	2.5	1.5	9.2	.5	--	K34
FEB 28...	1300	108	36	4.7	3.0	1.5	12.5	1.0	<1	--
MAR 19...	1000	259	42	4.2	7.5	1.0	10.0	2.3	<1	130
APR 23...	1000	116	38	4.6	12.5	2.4	8.9	.5	<1	230
MAY 15...	1100	161	41	4.5	18.0	3.5	7.9	1.3	6	1200
JUN 18...	1030	93	38	4.5	18.5	2.5	8.3	1.2	16	270
JUL 23...	0945	69	32	4.5	22.5	6.0	7.0	.7	140	1000
AUG 07...	1130	62	26	--	24.0	5.6	7.1	.8	K13	520
SEP 16...	1300	36	29	4.7	18.0	2.5	8.7	.9	K18	190

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 29...	3	.5	.4	2.1	.5	0	4.1	3.8	.1	4.0
NOV 27...	3	.6	.3	2.2	.6	0	5.0	4.2	.0	4.5
DEC 06...	3	.6	.4	2.0	.5	1	4.7	3.2	.0	5.5
JAN 29...	3	.7	.4	2.1	.5	0	6.8	4.0	.0	4.7
FEB 28...	3	.7	.4	1.9	.5	0	6.1	3.4	.1	4.7
MAR 19...	3	.7	.3	2.1	.6	0	5.8	3.6	.0	3.3
APR 23...	3	.6	.3	1.9	.5	0	5.2	3.7	.0	3.4
MAY 15...	3	.5	.3	2.3	.4	0	3.9	3.5	.0	3.5
JUN 18...	2	.5	.3	1.8	.3	0	4.7	3.7	.0	4.1
JUL 23...	3	.7	.3	1.8	.5	5	3.4	3.4	.1	5.3
AUG 07...	5	1.5	.4	1.9	.5	1	3.9	3.4	.0	6.1
SEP 16...	3	.6	.4	2.2	.6	2	3.9	3.3	.0	6.9

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT 29...	24	11	4.2	56	.02	.02	.030	.030	.28	.25
NOV 27...	21	23	13	21	.01	.01	.010	.010	.35	.22
DEC 06...	20	6	1.2	43	.02	.01	.040	.040	.28	.28
JAN 29...	25	6	2.2	11	.02	.02	.040	.040	.11	.10
FEB 28...	19	7	2.0	7	--	.02	.260	.030	.34	.34
MAR 19...	23	11	7.7	4	.03	.03	.040	.040	.06	.05
APR 23...	24	8	2.5	52	.01	.01	.020	.020	.13	.07
MAY 15...	21	12	5.2	57	.01	.00	.000	.000	.29	.01
JUN 18...	20	10	2.5	41	.01	.01	.050	--	.25	--
JUL 23...	22	15	2.8	59	.01	.01	.030	.020	.34	.25
AUG 07...	28	9	1.5	54	.02	.02	.050	.030	.11	.00
SEP 16...	20	9	.87	50	.02	.02	.010	.010	.11	.06

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 29...	.31	.03	.28	.30	.33	.010	.000	5.4	--	--
NOV 27...	.36	.13	.23	.24	.37	.010	.000	--	6.1	.5
DEC 06...	.32	.00	.32	.33	.34	.010	.000	5.4	--	--
JAN 29...	.15	.01	.14	.16	.17	.010	.010	6.2	--	--
FEB 28...	.60	.23	.37	.39	--	.020	.010	--	1.8	.1
MAR 19...	.10	.01	.09	.12	.13	.010	.010	7.8	--	--
APR 23...	.15	.06	.09	.10	.16	.020	.000	5.2	--	--
MAY 15...	.29	.28	.01	.01	.30	.040	.000	--	7.3	1.2
JUN 18...	.30	--	--	--	.31	.020	.000	5.6	--	--
JUL 23...	.37	.10	.27	.28	.38	.070	.000	10	--	--
AUG 07...	.16	.13	.03	.05	.18	.040	.000	--	--	E5.0
SEP 16...	.12	.05	.07	.09	.14	.000	.000	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 27...	1100	2	0	2	20	0	20	0	0	0	10
FEB 28...	1300	3	1	2	<50	<30	20	8	0	8	<10
MAY 15...	1100	1	0	1	<50	--	20	7	0	7	<10
AUG 07...	1130	3	1	2	200	100	100	3	3	0	20

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
NOV											
27...	0	10	0	0	0	4	0	4	1800	1300	520
FEB											
28...	0	<10	2	0	2	2	1	1	800	270	530
MAY											
15...	--	<10	0	0	0	2	0	2	2300	1800	460
AUG											
07...	10	10	3	3	0	0	0	0	3600	3300	270

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NOV											
27...	2	1	1	20	0	20	.1	.0	<.1	3	2
FEB											
28...	3	3	0	10	0	10	<.1	.0	<.1	1	0
MAY											
15...	3	3	0	20	10	10	.2	--	<.1	0	0
AUG											
07...	12	12	0	10	0	10	.1	--	<.1	33	32

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV										
27...	1	0	0	0	0	0	0	20	20	0
FEB										
28...	1	0	0	0	0	0	0	120	0	120
MAY										
15...	0	0	0	0	0	0	0	20	0	20
AUG										
07...	1	0	0	0	0	0	0	10	0	10

DATE	LENGTH OF EXPOSURE (DAYS)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
DEC						
06...	36	.630	.070	1.88	.150	298
MAY						
15...	21	.315	.157	.030	.000	5267
AUG						
07...	14	.551	.394	.090	.000	1744

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	NOV 27,79 1100	MAR 19,80 1000	MAY 15,80 1100	JUN 18,80 1030
TOTAL CELLS/ML	350	0	52	170
DIVERSITY: DIVISION	0.9	0.0	0.8	1.8
.CLASS	0.9	0.0	0.8	1.8
..ORDER	1.4	0.0	0.8	2.2
...FAMILY	1.5	0.0	0.8	2.4
....GENUS	1.5	0.0	0.8	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	13	8
....CHLORELLA	95#	28	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	--	-	26#	15
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	5	1	--	-	13#	25	39#	23
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	210#	61	--	-	--	-	13	8
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	5	1	--	-	--	-	--	-
...EUNOTIACEAE								
....EUNOTIA	25	7	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	5	1	--	-	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....DINOBRYON	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	39#	23
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	39#	75	39#	23
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
....PHORMIDIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MULLICA RIVER BASIN

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	JUL 23,80 0945		AUG 7,80 1130		SEP 16,80 1300	
TOTAL CELLS/ML	1100		1400		230	
DIVERSITY: DIVISION	0.4		1.2		1.1	
.CLASS	0.4		1.3		1.1	
..ORDER	0.4		1.8		1.2	
...FAMILY	0.4		1.9		1.2	
....GENUS	0.4		2.4		1.2	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	13	6
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	260#	19	39#	17
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	--	-	--	-	--	-
...EUNOTIACEAE						
....EUNOTIA	14	1	--	-	--	-
...NAVICULACEAE						
....NAVICULA	14	1	--	-	--	-
....PINNULARIA	--	-	14	1	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	14	1	--	-
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...OCHROMONADACEAE						
....DINOBRYON	--	-	160	12	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	43	4	--	-	13	6
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	210#	15	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	270#	20	170#	72
....PHORMIDIUM	1100#	94	430#	31	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01410000 OSWEGO RIVER AT HARRISVILLE, NJ

LOCATION.--Lat 39°39'47", long 74°31'26", Burlington County, Hydrologic Unit 02040301, and right bank 50 ft (15 m) downstream from bridge on State Highway Spur 563 at Harrisville, and 0.5 mi (0.8 km) upstream from confluence with West Branch Wading River.

DRAINAGE AREA.--64.0 mi² (165.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1955, published as "East Branch Wading River at Harrisville".

GAGE.--Water-stage recorder. Concrete control since June 23, 1939. Datum of gage is 4.62 ft (1.408 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those above 200 ft³/s (5.7 m³/s), which are fair. Figures given herein represent flow over main spillway and through bypass channel. Flow regulated by Harrisville Pond 200 ft (61 m) above station, capacity, about 30,000,000 gal (114,000 m³) and by ponds and cranberry bogs 5 to 10 mi (8 to 16 km) upstream.

AVERAGE DISCHARGE.--50 years, 89.0 ft³/s (2.520 m³/s), 18.88 in/yr (480 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Aug. 20, 1939, gage height, 9.54 ft (2.908 m), from high-water mark in gage house, from rating curve extended above 640 ft³/s (18.1 m³/s); no flow part of Oct. 26, 1932, June 10, 1970, and May 29, 30, 1974, while pond was filling.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 344 ft³/s (9.74 m³/s) Apr. 11, gage height, 4.12 ft (1.256 m); minimum, 22 ft³/s (0.62 m³/s) Sept. 25, gage height, 2.77 ft (0.844 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	73	101	100	75	65	280	221	70	80	73	31
2	176	73	90	97	69	71	284	233	67	78	70	30
3	160	92	82	93	63	67	244	213	75	67	62	32
4	129	106	78	90	81	68	253	181	75	73	63	26
5	116	106	76	95	82	72	280	150	65	67	58	27
6	121	96	75	95	74	74	244	134	70	63	61	27
7	119	86	86	94	69	72	200	123	58	57	45	27
8	108	81	83	97	67	76	173	121	67	54	47	26
9	95	75	77	92	67	77	187	122	61	54	50	26
10	114	73	74	87	67	78	296	116	74	65	45	41
11	157	80	72	94	66	95	332	123	72	45	42	24
12	166	125	73	153	66	91	301	152	67	50	65	25
13	164	135	80	147	65	95	271	168	76	53	72	26
14	172	136	85	129	65	176	229	153	68	50	68	27
15	162	129	80	121	65	184	214	118	70	45	63	32
16	134	114	76	113	74	156	188	95	85	41	58	28
17	120	107	81	107	80	139	152	83	71	49	49	27
18	113	97	78	102	75	150	142	110	70	52	45	33
19	105	89	77	116	72	144	120	113	68	55	44	30
20	97	86	79	113	72	131	98	118	65	55	43	31
21	92	87	78	104	73	147	104	121	60	55	41	29
22	84	92	84	101	77	184	109	121	58	50	40	31
23	77	90	94	112	85	195	102	113	54	50	38	25
24	71	77	105	108	87	165	102	100	55	51	37	24
25	67	78	132	101	87	221	101	93	45	51	35	26
26	67	90	138	96	87	243	99	87	47	49	35	28
27	66	106	128	91	82	251	106	79	49	46	34	25
28	65	110	118	89	78	180	128	83	55	41	33	24
29	65	109	112	86	75	186	149	70	58	74	35	24
30	68	107	109	82	---	218	164	71	99	98	34	23
31	71	---	105	79	---	230	---	73	---	84	38	---
TOTAL	3518	2905	2806	3184	2145	4301	5652	3858	1974	1802	1523	835
MEAN	113	96.8	90.5	103	74.0	139	188	124	65.8	58.1	49.1	27.8
MAX	197	136	138	153	87	251	332	233	99	98	73	41
MIN	65	73	72	79	63	65	98	70	45	41	33	23
CFSM	1.77	1.51	1.41	1.61	1.16	2.17	2.94	1.94	1.03	.91	.77	.43
IN.	2.04	1.69	1.63	1.85	1.25	2.50	3.29	2.24	1.15	1.05	.89	.49

CAL YR 1979 TOTAL 52406 MEAN 144 MAX 834 MIN 57 CFSM 2.25 IN 30.46
WTR YR 1980 TOTAL 34503 MEAN 94.3 MAX 332 MIN 23 CFSM 1.47 IN 20.05

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-63, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT									
10...	1030	103	40	4.4	12.0	9.5	1.0	<20	6
FEB									
06...	0900	73	48	4.3	1.5	--	E1.1	<20	<2
APR									
01...	0840	278	59	4.4	5.0	11.4	1.0	<20	2
MAY									
28...	0945	87	36	4.6	18.5	8.9	.9	<20	5
JUL									
10...	1045	70	37	4.9	23.5	6.7	.7	<20	2
AUG									
12...	0900	70	39	--	24.5	7.6	1.3	<20	540
SEP									
24...	1030	24	36	4.4	21.0	8.2	<1.1	<20	14

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
10...	4	.8	.4	3.5	.6	0	--	3.5	3.9
FEB									
06...	4	.8	.5	2.8	.9	0	--	6.5	4.3
APR									
01...	4	.8	.5	2.0	.6	0	--	5.6	3.3
MAY									
28...	4	1.0	.4	3.5	.5	0	.0	4.2	3.8
JUL									
10...	4	.6	.5	2.2	.6	0	--	5.0	4.5
AUG									
12...	3	.7	.4	2.4	.8	0	--	4.8	3.6
SEP									
24...	4	.8	.6	3.0	.9	0	.0	7.5	16

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	.0	4.9	24	<1.0	.280	.38	.66	.01	4.5
FEB									
06...	.0	6.4	29	E.10	.080	.28	.36	<.01	6.9
APR									
01...	.0	2.8	32	<.02	.030	--	--	<.01	5.7
MAY									
28...	.0	4.9	22	<.05	.070	.10	.17	.07	4.9
JUL									
10...	.0	6.2	--	<.05	.110	.28	.39	.11	4.6
AUG									
12...	.1	7.9	26	<.05	.260	.16	.42	.06	5.7
SEP									
24...	.0	9.0	60	<.05	.100	.25	.35	.06	2.1

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 10...	1030	400	.0	1.8	--	--	0	--	--	--	<10
MAY 28...	0945	--	--	--	110	1	--	0	20	0	--
SEP 24...	1030	--	--	--	120	1	--	0	20	0	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 10...	--	<10	<10	--	<10	--	2100	--	<10	--
MAY 28...	10	--	--	2	--	1200	--	4	--	10
SEP 24...	10	--	--	2	--	710	--	3	--	20

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 10...	<10	--	.00	--	<10	--	0	--	10	--
MAY 28...	--	<.1	--	1	--	0	--	10	--	6
SEP 24...	--	<.1	--	3	--	0	--	20	--	3

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	0	.0	0	.6	.9	1.2	.0	.0	.0	.0
MAY 28...	--	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY 28...	--	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	--	--	--	--	--	--	--	--

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, on left bank upstream of bridge on Stage Road, 0.7 mi (1.1 km) west of Lake Absegami, 2.2 mi (3.5 km) north of New Gretna, and 5.3 mi (8.5 km) upstream from mouth.

DRAINAGE AREA.--8.11 mi^2 (21.00 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969 to 1974. January 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5 ft (1.5 m), from topographic map.

REMARKS.--Water-discharge records fair. Some regulation by Lake Absegami.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 260 ft^3/s (7.36 m^3/s) July 4, 1978, gage height, 5.87 ft (1.789 m); minimum, 8.3 ft^3/s (0.24 m^3/s) Aug. 11, 1980, gage height, 3.86 ft (1.177 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge 67 ft^3/s (1.90 m^3/s) Apr. 10, gage height, 5.26 ft (1.603 m); minimum, 8.3 ft^3/s (0.24 m^3/s) Aug. 11, gage height, 3.86 ft (1.177 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	15	15	17	12	9.9	43	54	17	27	13	12
2	23	15	14	17	11	10	36	43	16	18	12	12
3	20	20	14	16	12	9.9	30	35	16	15	11	11
4	17	24	14	15	14	9.9	34	31	20	17	12	10
5	17	20	14	16	15	11	41	29	17	15	11	11
6	22	17	14	16	14	11	34	28	15	13	9.9	9.6
7	20	16	18	17	14	10	29	27	15	13	9.7	9.4
8	17	15	17	16	13	11	27	27	27	12	9.3	9.2
9	16	15	15	16	13	11	34	27	35	12	9.1	9.2
10	24	15	14	15	12	11	63	26	27	15	8.8	9.0
11	31	19	14	20	11	15	46	25	23	15	8.8	10
12	26	30	13	27	11	14	36	25	19	13	16	11
13	27	28	15	24	11	14	33	25	17	12	18	9.8
14	29	23	17	19	11	34	32	24	16	11	12	9.0
15	25	19	15	16	11	31	34	23	15	11	10	9.6
16	21	18	14	15	13	21	32	21	21	11	9.5	10
17	20	17	14	15	14	17	29	21	21	11	9.1	11
18	19	17	13	15	12	23	27	23	17	12	8.9	10
19	19	16	13	21	11	22	27	26	16	11	9.0	11
20	18	16	12	20	11	18	26	25	15	11	8.9	12
21	18	16	13	16	11	23	25	25	14	10	9.8	11
22	18	16	14	15	12	28	25	25	14	10	11	10
23	17	15	15	19	13	25	24	23	13	17	13	9.8
24	16	15	16	17	13	21	24	20	13	16	15	8.8
25	16	15	18	15	12	35	25	19	13	12	14	9.4
26	16	20	21	15	12	33	24	18	13	11	13	11
27	16	22	20	14	11	26	27	17	13	10	12	10
28	15	19	19	14	10	22	34	16	13	10	12	9.4
29	16	16	19	14	10	28	38	16	15	13	11	9.1
30	15	15	18	13	---	36	38	16	31	21	11	9.0
31	15	---	18	13	---	35	---	16	---	17	11	---
TOTAL	616	544	480	518	350	625.7	977	776	537	422	348.8	303.3
MEAN	19.9	18.1	15.5	16.7	12.1	20.2	32.6	25.0	17.9	13.6	11.3	10.1
MAX	31	30	21	27	15	36	63	54	35	27	18	12
MIN	15	15	12	13	10	9.9	24	16	13	10	8.8	8.8
CFSM	2.45	2.23	1.91	2.06	1.49	2.49	4.02	3.08	2.21	1.68	1.39	1.25
IN.	2.83	2.49	2.20	2.38	1.61	2.87	4.48	3.56	2.46	1.94	1.60	1.39

CAL YR 1979 TOTAL 8001.0 MEAN 21.9 MAX 117 MIN 11 CFSM 2.70 IN 36.70
WTR YR 1980 TOTAL 6497.8 MEAN 17.8 MAX 63 MIN 8.8 CFSM 2.20 IN 29.80

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.-Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 10...	1230	24	45	4.2	11.0	7.7	1.0	700	1600	0
FEB 06...	1015	11	49	4.2	1.0	14.0	<.9	20	2	3
APR 01...	1030	44	51	4.4	6.0	10.4	1.2	<20	9	4
MAY 28...	1115	16	37	4.6	16.0	7.6	.6	<20	<2	3
JUL 10...	1145	16	44	5.2	19.0	7.5	.8	310	130	3
AUG 12...	0950	17	44	3.3	21.0	5.3	1.4	2800	920	4
SEP 24...	1145	8.8	32	4.6	16.5	7.0	<.9	<24000	<2400	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 10...	--	--	--	--	0	--	3.6	5.4	.0
FEB 06...	.5	.5	3.0	.6	1	--	5.4	5.0	.0
APR 01...	.6	.7	2.8	.6	2	--	5.2	4.9	.0
MAY 28...	.5	.5	3.5	.4	2	.4	3.6	5.1	.0
JUL 10...	.4	.4	3.3	.5	0	--	3.3	5.1	.0
AUG 12...	.7	.6	2.0	.6	0	--	4.8	4.9	.1
SEP 24...	.5	.5	3.2	.6	2	.0	2.9	4.8	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	--	28	<1.0	.490	1.4	1.9	--	.05	--
FEB 06...	7.7	24	<.10	.080	.13	.21	--	<.01	6.5
APR 01...	3.6	38	<.02	<.030	--	<.03	--	<.01	5.8
MAY 28...	5.9	20	<.05	.070	.00	.07	--	.06	7.8
JUL 10...	6.9	--	.05	.120	.29	.41	.46	.07	5.2
AUG 12...	8.5	30	.06	.200	.27	.47	.53	.06	12
SEP 24...	9.9	22	<.05	.110	.10	.21	--	.03	2.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 28...	1115	100	1	0	30	0	20	1
SEP 24...	1145	90	1	0	30	0	10	2

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
28...	370	8	10	<.1	2	0	10	4
SEP								
24...	360	6	10	<.1	3	0	20	3

01410500 ABSECON CREEK AT ABSECON, NJ

LOCATION.--Lat 39°25'45", long 74°31'16", Atlantic County, Hydrologic Unit 02040302, on right bank 30 ft (9 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1.0 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--16.6 mi^2 (43.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1923 to April 1929 and June 1933 to December 1938 (monthly discharge only, published in WSP 1302; figures of daily discharge published in previous water-supply papers included diversions above station), May 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 1946, water-stage recorder and wooden control at same site at datum 0.16 ft (0.049 m) lower.

REMARKS.--Water-discharge records fair. Records represent flow at gage only. Diversion from Doughty Pond for municipal supply at Atlantic City (records given herein). Flow regulated by Doughty Pond, capacity, 245,000,000 gal (927,300 m^3), and by Kuehule Reservoir, capacity, 250,000,000 gal (946,200 m^3), 1.5 mi (2.4 km) above station.

AVERAGE DISCHARGE.--43 years (water years 1925-28, 1934-38, 1947-80), 27.1 ft^3/s (0.767 m^3/s), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 295 ft^3/s (8.35 m^3/s) Sept. 6, 1935; no flow several days in many years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 105 ft^3/s (2.97 m^3/s) Apr. 10; minimum daily, 4.2 ft^3/s (0.119 m^3/s) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	19	17	16	13	73	49	22	24	12	8.0
2	15	18	24	16	15	14	49	60	22	17	12	7.2
3	15	34	17	15	15	13	34	67	22	18	11	7.2
4	12	23	21	15	15	12	54	60	25	19	9.6	4.7
5	14	21	22	25	16	12	63	52	27	15	8.8	7.2
6	18	20	25	17	17	11	43	46	27	18	15	11
7	20	20	37	16	16	12	33	41	25	11	11	12
8	17	18	30	17	16	15	32	36	27	12	7.2	8.0
9	17	18	23	17	17	15	51	32	35	13	7.2	8.8
10	37	21	23	15	18	14	105	30	32	18	4.2	8.8
11	41	34	22	19	16	23	68	30	33	17	5.3	9.6
12	32	54	22	46	15	13	46	30	31	17	29	8.8
13	33	40	28	28	16	28	43	29	30	13	27	9.6
14	34	32	27	23	14	30	40	28	29	12	14	12
15	23	24	22	27	12	33	46	29	31	12	12	13
16	18	23	22	16	17	39	38	28	33	12	13	8.8
17	17	20	23	17	14	45	30	26	36	12	7.2	11
18	17	20	14	21	12	50	32	25	38	12	8.8	15
19	18	21	16	32	12	43	30	25	35	12	15	14
20	19	21	16	23	12	36	30	26	32	12	16	12
21	19	21	16	20	12	29	30	28	29	11	14	12
22	18	21	17	20	13	35	30	31	26	14	12	12
23	18	22	17	28	13	42	30	34	23	32	12	13
24	22	21	17	20	14	40	30	33	20	22	8.8	9.6
25	17	22	18	18	14	41	31	31	17	15	8.0	20
26	16	29	19	18	15	41	32	28	15	12	8.0	32
27	15	28	20	16	8.0	30	34	26	15	12	7.2	20
28	16	23	21	17	9.6	25	38	24	15	11	6.5	14
29	18	20	22	17	12	41	44	23	28	15	5.9	13
30	16	18	21	16	---	49	50	23	41	14	5.3	13
31	17	---	19	16	---	54	---	22	---	12	6.5	---
TOTAL	624	724	660	628	411.6	898	1289	1052	821	466	339.5	355.3
MEAN	20.1	24.1	21.3	20.3	14.2	29.0	43.0	33.9	27.4	15.0	11.0	11.8
MAX	41	54	37	46	18	54	105	67	41	32	29	32
MIN	12	17	14	15	8.0	11	30	22	15	11	4.2	4.7
(†)	.5	.7	.5	.9	.7	.7	.9	2.1	3.1	2.2	2.2	.9

CAL YR 1979 TOTAL 11866.1 MEAN 32.5 MAX 265 MIN 6 † 5.5
WTR YR 1980 TOTAL 8268.4 MEAN 22.6 MAX 105 MIN 4.2 † 1.3

† Diversion, in cubic feet per second, above station from Doughty Pond for municipal supply by Atlantic City.

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ

LOCATION.--Lat 39°44'02", long 74°57'05", Camden County, Hydrologic Unit 02040302, at bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi (2.4 km) northeast of Sicklerville, and 2.7 mi (4.3 km) upstream of New Brooklyn Lake dam.

DRAINAGE AREA.--15.1 mi² (39.1 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 02...	1030	57	66	4.8	17.5	4.3	1.8	330	790	13
JAN 24...	1230	19	95	6.0	2.0	8.7	2.4	11	8	16
MAR 18...	1230	23	98	5.7	9.0	8.4	3.5	5	<2	16
MAY 28...	1300	8.1	101	6.2	15.5	6.4	2.5	20	540	19
JUL 15...	1300	E2.7	167	6.5	22.0	4.6	1.5	230	1300	23
AUG 13...	1000	3.3	144	6.8	21.5	4.7	1.4	80	220	25

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 02...	3.2	1.1	5.0	1.6	2	0	2	.0	8.4	7.3
JAN 24...	4.0	1.4	8.1	1.6	5	0	4	--	13	11
MAR 18...	4.0	1.5	10	2.0	4	0	3	--	12	15
MAY 28...	4.7	1.8	10	2.1	12	0	10	.3	11	11
JUL 15...	5.9	2.1	19	4.5	27	0	22	--	11	20
AUG 13...	6.1	2.3	13	3.3	20	0	16	--	17	15

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	.1	5.7	--	<1.0	.600	.39	.99	--	.73	23
JAN 24...	.1	6.1	61	.42	E.690	--	E.69	--	.80	8.5
MAR 18...	.1	5.6	74	.85	.520	.38	.90	1.8	E.78	8.8
MAY 28...	.1	6.5	75	2.1	.340	.66	1.0	3.1	1.0	4.8
JUL 15...	.1	5.8	104	2.2	.200	.60	.80	3.0	3.2	3.9
AUG 13...	.1	5.9	98	1.8	.090	.67	.76	2.6	2.0	5.3

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT											
02...	1030	500	.5	6.1	350	4	0	0	140	0	<10
MAY											
28...	1300	--	--	--	110	1	--	0	90	0	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
02...	10	<10	<10	5	<10	1100	1300	13	30	30
MAY										
28...	10	--	--	3	--	620	--	1	--	20

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT										
02...	<10	<.5	.00	2	<10	0	0	40	10	1
MAY										
28...	--	.1	--	1	--	0	--	20	--	3

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
02...	1	.0	2	3.9	1.3	8.4	.0	.0	.0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
02...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY										
28...	--	--	--	--	--	--	--	--	--	--

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ

LOCATION.--39°40'09", long 74°54'49", Camden County, Hydrologic Unit 02040302, downstream side of bridge on Broad Lane Road, 2.1 mi (3.4 km) downstream from confluence of Fourmile Branch, and 1.9 mi (3.1 km) southwest of Blue Anchor.

DRAINAGE AREA.--37.3 mi² (96.6 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 09...	1100	63	114	6.1	13.5	8.6	.9	79	350	17
JAN 24...	1100	73	71	5.7	2.0	9.0	1.5	80	240	14
MAR 18...	1030	82	70	5.6	9.0	9.4	3.1	230	23	14
MAY 28...	1030	39	71	6.2	14.5	8.4	1.5	40	1300	14
JUL 14...	1200	24	87	6.6	19.0	7.4	1.3	130	790	15
AUG 13...	1140	32	79	6.7	20.0	7.4	1.0	220	700	--

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 09...	2.8	2.4	6.4	1.7	--	0	--	.0	7.0	22
JAN 24...	3.1	1.5	5.8	1.2	2	0	2	--	8.9	9.1
MAR 18...	3.0	1.5	6.6	1.4	4	0	3	--	9.1	9.6
MAY 28...	2.9	1.7	6.8	1.4	12	0	10	--	6.1	8.1
JUL 14...	3.0	1.7	7.5	2.0	12	0	10	--	6.5	10
AUG 13...	--	--	7.6	2.0	12	0	10	--	6.9	9.4

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	.1	6.9	81	1.1	.290	.22	.51	1.6	.74	8.0
JAN 24...	.1	5.6	50	.55	E.310	--	.51	1.1	.22	11
MAR 18...	.1	4.8	56	.93	.090	.27	.36	1.3	.43	8.7
MAY 28...	.1	6.1	48	1.6	.220	1.5	1.7	3.3	1.2	4.5
JUL 14...	.0	6.1	60	1.3	.120	.43	.55	1.8	1.2	2.9
AUG 13...	.1	6.5	59	1.1	.070	.43	.50	1.6	1.1	4.1

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 09...	1100	190	1	0	0	90	0	<10	20	<10

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT										
09...	4	<10	560	2700	7	<10	20	190	<.5	.00

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
09...	2	0	0	20	10	0	0	.0	.0	0

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT										
09...	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
09...	.0	.0	.0	.0	.0	.0	.0	.00	0	.0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ

LOCATION.--Lat 39°35'42", long 74°51'06", Atlantic County, Hydrologic Unit 02040302, on left bank, 25 ft (7.6 m) upstream from bridge on State Highway 54, 1.0 mi (1.6 km) south of Folsom, and 2.0 mi (3.2 km) upstream from Pennypot Stream.

DRAINAGE AREA.--56.3 mi^2 (145.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1925 to current year. Prior to October 1947, published as "Great Egg River at Folsom".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1928(M), 1933.

GAGE.--Water-stage recorder. Concrete control since Nov. 26, 1934. Datum of gage is 53.32 ft (16.252 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 6, 1941, water-stage recorder at site 100 ft (30 m) downstream at same datum. Mar. 6 to Oct. 5, 1941, nonrecording gage at site 145 ft (44 m) downstream at datum 0.25 ft (0.076 m) higher.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--55 years, 87.1 ft^3/s (2.467 m^3/s), 21.01 in/yr (534 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft^3/s (40.8 m^3/s) Sept. 3, 1940, gage height, 9.09 ft (2.771 m); minimum, 15 ft^3/s (0.42 m^3/s) Sept. 6, 1957, Aug. 28-30, 1966; minimum gage height, 3.42 ft (1.042 m) Aug. 28-30, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 312 ft^3/s (8.84 m^3/s) Apr. 11, gage height, 5.31 ft (1.618 m); minimum, 24 ft^3/s (0.68 m^3/s) Sept. 12-16, gage height, 3.51 ft (1.070 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	74	97	76	75	71	243	176	64	99	44	29
2	140	74	89	75	73	69	275	209	62	87	67	28
3	154	80	84	74	72	68	257	208	62	75	65	29
4	154	96	81	73	70	68	238	182	64	78	64	28
5	141	114	79	73	70	70	234	153	67	72	59	28
6	125	117	79	74	69	74	218	126	63	65	52	28
7	106	107	84	74	68	75	189	110	62	58	48	28
8	94	97	92	75	70	76	163	102	75	54	46	27
9	87	90	95	75	70	80	153	103	81	51	43	25
10	95	86	90	74	70	83	210	106	77	57	40	25
11	130	89	85	75	70	85	296	104	78	57	40	25
12	184	108	82	106	70	89	302	99	75	53	67	25
13	203	135	82	159	68	88	250	97	69	48	65	24
14	202	155	89	193	67	104	203	101	63	45	54	24
15	184	145	96	170	67	149	177	102	61	42	48	25
16	155	132	96	142	71	182	163	98	73	41	46	25
17	130	119	91	117	80	167	151	90	78	42	42	25
18	112	107	87	103	79	146	138	89	74	52	40	35
19	100	98	82	106	75	126	126	91	69	48	40	37
20	93	92	80	121	73	113	118	81	64	43	40	33
21	87	90	79	126	73	113	113	93	60	41	39	31
22	83	87	79	116	76	149	108	96	57	40	39	30
23	80	85	82	111	84	192	102	100	54	53	38	28
24	78	83	86	114	91	189	97	94	51	53	36	27
25	81	81	90	108	92	201	95	85	49	49	34	29
26	83	84	95	99	88	213	95	79	48	46	33	35
27	81	94	97	92	83	208	98	74	47	43	32	33
28	79	108	92	88	77	180	107	70	47	40	31	31
29	78	114	85	85	74	163	124	68	51	41	29	30
30	77	107	81	83	---	167	143	65	88	41	29	29
31	75	---	78	79	---	194	---	65	---	40	29	---
TOTAL	3581	3048	2684	3136	2165	3952	5186	3316	1933	1654	1379	856
MEAN	116	102	86.6	101	74.7	127	173	107	64.4	53.4	44.5	28.5
MAX	203	155	97	193	92	213	302	209	88	99	67	37
MIN	75	74	78	73	67	68	95	65	47	40	29	24
CFSM	2.06	1.81	1.54	1.79	1.33	2.26	3.07	1.90	1.14	.95	.79	.51
IN.	2.37	2.01	1.77	2.07	1.43	2.61	3.43	2.19	1.28	1.09	.91	.57

CAL YR 1979 TOTAL 44882 MEAN 123 MAX 751 MIN 52 CFSM 2.19 IN 29.66
WTR YR 1980 TOTAL 32890 MEAN 89.9 MAX 302 MIN 24 CFSM 1.60 IN 21.73

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to April 1975, April 1977 to May 1980 (discontinued).
WATER TEMPERATURES: October 1960 to April 1975, April 1977 to May 1980 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: December 1965 to September 1970, October 1978 to September 1979. Record for 1980 is unpublished and is available in files of New Jersey District Office.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor April 1969 to April 1975, and April 1977 to May 1980.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 163 micromhos Aug. 25, 1977; minimum, 41 micromhos July 14, 1972.
WATER TEMPERATURES: Maximum, 24.0°C July 23-24, 1972, Aug. 17, 1978; minimum, 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 46 mg/L July 31, 1969; minimum daily, less than 0.5 mg/L on many days from 1965 to 1970.
SEDIMENT LOADS: Maximum daily 59 tons (54 Mg) April 17, 1970; minimum daily 0.03 ton (0.03 Mg) Sept. 19, 1968.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: For period October 1979 to May 1980, maximum, 118 micromhos Jan. 9; minimum, 50 micromhos Oct. 1.
TEMPERATURE: For period November 1979 to May 1980, maximum, 19.5°C May 6, 7; minimum, 0.5°C Feb. 2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				10.5	8.5	9.5	5.0	3.5	4.0	5.5	4.0	5.0
2				12.0	10.0	11.0	5.0	3.5	4.0	5.5	5.0	5.0
3				12.0	11.0	11.5	4.5	3.5	4.0	6.0	5.0	5.5
4				10.5	8.5	9.5	5.5	4.0	4.5	5.0	4.0	4.5
5				8.5	7.0	7.5	6.0	4.5	5.0	4.0	3.0	3.0
6				8.0	6.0	7.0	7.5	6.0	6.5	3.5	2.5	3.0
7				9.0	7.0	8.0	8.0	7.5	7.5	4.0	2.5	3.0
8				8.5	6.5	7.5	7.5	6.0	7.0	5.0	4.0	4.5
9				10.0	8.0	8.5	5.5	4.0	4.5	4.5	4.0	4.5
10				10.5	9.5	10.0	5.5	4.0	4.5	4.0	3.0	3.5
11				11.0	8.5	10.0	7.0	3.5	5.5	7.0	3.5	4.5
12				9.0	7.5	8.5	8.5	6.5	7.5	7.5	4.0	6.0
13				10.0	7.5	9.0	9.0	8.5	9.0	4.0	3.0	3.5
14				9.5	9.0	9.0	9.0	6.5	7.5	5.0	2.5	---
15				8.0	7.0	7.5	6.0	4.5	5.0	7.0	5.0	5.5
16				8.0	6.5	7.0	6.0	4.0	5.0	6.5	4.5	5.5
17				7.5	6.0	6.5	6.0	3.5	5.0	5.5	4.0	4.5
18				8.5	6.5	7.5	---	---	---	6.0	5.0	5.5
19				9.0	7.0	8.0	3.0	2.5	---	6.5	6.0	6.0
20				10.0	8.5	9.0	4.0	3.0	3.5	5.5	4.0	5.0
21				9.5	8.0	8.5	5.0	3.5	4.0	4.5	3.0	3.5
22				9.5	7.5	8.5	6.5	5.0	5.5	4.0	2.5	3.0
23				11.0	9.0	10.0	7.5	6.5	7.0	5.0	3.5	4.5
24				12.5	10.5	11.5	8.5	7.5	8.0	3.5	2.0	2.5
25				13.0	12.0	12.5	9.5	8.5	9.0	2.5	1.0	2.0
26				14.5	13.0	14.0	9.0	7.5	8.5	3.5	2.0	2.5
27				13.5	11.0	12.5	7.5	6.0	6.5	3.5	2.0	3.0
28				11.5	10.0	11.0	6.0	5.0	5.5	4.5	3.5	4.0
29				10.5	7.0	9.0	6.5	5.0	6.0	4.5	3.5	4.0
30				6.5	5.0	6.0	6.5	5.5	6.0	3.5	2.5	2.5
31				---	---	---	6.0	5.0	5.5	3.0	2.0	2.5
MONTH				14.5	5.0	9.0	9.5	2.5	6.0	7.5	1.0	4.0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	52	50	52	84	80	83	68	68	68	90	88	89
2	57	52	55	85	84	84	72	67	69	90	88	89
3	59	55	57	85	72	78	76	71	72	91	89	90
4	60	58	59	71	68	70	77	74	76	91	90	91
5	60	58	59	69	68	68	78	76	77	91	88	90
6	59	59	59	69	68	68	83	77	81	92	88	90
7	62	59	61	68	67	67	77	69	73	101	90	93
8	67	62	65	69	67	68	72	70	71	98	91	93
9	73	68	71	70	69	69	72	70	71	118	97	104
10	73	57	66	72	70	71	72	71	71	117	104	108
11	56	52	53	71	62	67	76	71	73	112	103	106
12	58	53	56	61	56	58	81	76	78	107	77	84
13	62	58	60	60	56	57	81	77	79	87	79	82
14	60	59	60	64	60	63	77	72	74	95	87	92
15	66	59	63	65	64	65	75	71	74	96	90	94
16	69	66	68	66	65	65	77	75	76	91	87	89
17	69	69	69	67	66	66	79	77	78	87	85	86
18	70	68	69	68	67	67	81	78	80	86	82	85
19	73	70	71	69	68	68	84	81	82	82	77	80
20	74	72	73	69	68	69	85	83	84	81	78	79
21	74	73	74	71	69	70	88	83	84	85	81	84
22	74	72	73	72	70	71	102	88	94	84	79	82
23	75	73	74	77	72	74	102	87	91	79	76	77
24	76	73	75	77	75	76	88	84	85	80	78	78
25	75	72	73	77	76	77	85	80	83	84	78	82
26	74	71	73	77	71	74	83	79	81	84	81	83
27	75	73	74	70	66	68	83	82	83	87	84	86
28	77	75	76	68	67	67	85	84	85	90	87	89
29	77	76	76	69	68	69	88	85	87	90	89	90
30	80	77	78	69	68	68	91	87	89	93	89	91
31	81	79	80	---	---	---	91	88	90	93	92	93
MONTH	81	50	67	85	56	70	102	67	79	118	76	89

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	100	94	97	106	101	104	89	81	84	91	84	88
2	108	89	101	107	102	105	86	82	83	86	84	85
3	108	104	106	108	104	106	91	86	89	91	87	88
4	112	107	110	112	106	108	92	91	92	93	91	92
5	113	107	110	111	105	109	93	92	92	99	93	95
6	113	107	110	109	101	104	96	92	94	101	98	99
7	110	104	107	113	103	109	98	96	97	102	100	101
8	104	100	101	109	103	107	98	97	98	105	102	104
9	106	99	101	104	99	101	98	90	95	103	102	102
10	107	105	106	105	100	103	89	81	84	102	101	102
11	108	105	106	106	97	102	85	82	83	103	101	102
12	109	105	106	100	98	99	90	85	88	113	101	104
13	107	103	105	102	94	100	94	91	93	115	109	112
14	105	102	104	94	83	88	97	95	96	109	107	107
15	102	98	99	95	83	89	97	96	97	110	107	109
16	103	97	99	100	95	98	98	96	97	112	110	111
17	110	90	97	101	100	100	98	96	97	112	110	111
18	111	106	108	100	96	98	100	98	99	114	111	113
19	109	106	108	98	95	96	100	99	99	---	---	---
20	107	105	106	97	96	96	101	99	100	---	---	---
21	107	104	105	97	84	91	102	101	102	---	---	---
22	106	101	104	83	79	80	103	100	101	---	---	---
23	100	97	98	91	80	86	100	99	100	---	---	---
24	100	92	95	94	90	93	101	100	101	---	---	---
25	93	90	91	90	82	87	103	101	102	---	---	---
26	94	91	93	85	81	82	103	102	103	---	---	---
27	97	94	96	93	86	90	104	100	103	---	---	---
28	100	96	98	94	93	93	100	95	98	---	---	---
29	101	97	99	93	89	91	95	94	95	---	---	---
30	---	---	---	89	86	87	95	90	93	---	---	---
31	---	---	---	89	86	88	---	---	---	---	---	---
MONTH	113	89	102	113	79	96	104	81	95	115	84	101

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	100	94	97	106	101	104	89	81	84	91	84	88
2	108	89	101	107	102	105	86	82	83	86	84	85
3	108	104	106	108	104	106	91	86	89	91	87	88
4	112	107	110	112	106	108	92	91	92	93	91	92
5	113	107	110	111	105	109	93	92	92	99	93	95
6	113	107	110	109	101	104	96	92	94	101	98	99
7	110	104	107	113	103	109	98	96	97	102	100	101
8	104	100	101	109	103	107	98	97	98	105	102	104
9	106	99	101	104	99	101	98	90	95	103	102	102
10	107	105	106	105	100	103	89	81	84	102	101	102
11	108	105	106	106	97	102	85	82	83	103	101	102
12	109	105	106	100	98	99	90	85	88	113	101	104
13	107	103	105	102	94	100	94	91	93	115	109	112
14	105	102	104	94	83	88	97	95	96	109	107	107
15	102	98	99	95	83	89	97	96	97	110	107	109
16	103	97	99	100	95	98	98	96	97	112	110	111
17	110	90	97	101	100	100	98	96	97	112	110	111
18	111	106	108	100	96	98	100	98	99	114	111	113
19	109	106	108	98	95	96	100	99	99	---	---	---
20	107	105	106	97	96	96	101	99	100	---	---	---
21	107	104	105	97	84	91	102	101	102	---	---	---
22	106	101	104	83	79	80	103	100	101	---	---	---
23	100	97	98	91	80	86	100	99	100	---	---	---
24	100	92	95	94	90	93	101	100	101	---	---	---
25	93	90	91	90	82	87	103	101	102	---	---	---
26	94	91	93	85	81	82	103	102	103	---	---	---
27	97	94	96	93	86	90	104	100	103	---	---	---
28	100	96	98	94	93	93	100	95	98	---	---	---
29	101	97	99	93	89	91	95	94	95	---	---	---
30	---	---	---	89	86	87	95	90	93	---	---	---
31	---	---	---	89	86	88	---	---	---	---	---	---
MONTH	113	89	102	113	79	96	104	81	95	115	84	101

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				10.5	8.5	9.5	5.0	3.5	4.0	5.5	4.0	5.0
2				12.0	10.0	11.0	5.0	3.5	4.0	5.5	5.0	5.0
3				12.0	11.0	11.5	4.5	3.5	4.0	6.0	5.0	5.5
4				10.5	8.5	9.5	5.5	4.0	4.5	5.0	4.0	4.5
5				8.5	7.0	7.5	6.0	4.5	5.0	4.0	3.0	3.0
6				8.0	6.0	7.0	7.5	6.0	6.5	3.5	2.5	3.0
7				9.0	7.0	8.0	8.0	7.5	7.5	4.0	2.5	3.0
8				8.5	6.5	7.5	7.5	6.0	7.0	5.0	4.0	4.5
9				10.0	8.0	8.5	5.5	4.0	4.5	4.5	4.0	4.5
10				10.5	9.5	10.0	5.5	4.0	4.5	4.0	3.0	3.5
11				11.0	8.5	10.0	7.0	3.5	5.5	7.0	3.5	4.5
12				9.0	7.5	8.5	8.5	6.5	7.5	7.5	4.0	6.0
13				10.0	7.5	9.0	9.0	8.5	9.0	4.0	3.0	3.5
14				9.5	9.0	9.0	9.0	6.5	7.5	5.0	2.5	---
15				8.0	7.0	7.5	6.0	4.5	5.0	7.0	5.0	5.5
16				8.0	6.5	7.0	6.0	4.0	5.0	6.5	4.5	5.5
17				7.5	6.0	6.5	6.0	3.5	5.0	5.5	4.0	4.5
18				8.5	6.5	7.5	---	---	---	6.0	5.0	5.5
19				9.0	7.0	8.0	3.0	2.5	---	6.5	6.0	6.0
20				10.0	8.5	9.0	4.0	3.0	3.5	5.5	4.0	5.0
21				9.5	8.0	8.5	5.0	3.5	4.0	4.5	3.0	3.5
22				9.5	7.5	8.5	6.5	5.0	5.5	4.0	2.5	3.0
23				11.0	9.0	10.0	7.5	6.5	7.0	5.0	3.5	4.5
24				12.5	10.5	11.5	8.5	7.5	8.0	3.5	2.0	2.5
25				13.0	12.0	12.5	9.5	8.5	9.0	2.5	1.0	2.0
26				14.5	13.0	14.0	9.0	7.5	8.5	3.5	2.0	2.5
27				13.5	11.0	12.5	7.5	6.0	6.5	3.5	2.0	3.0
28				11.5	10.0	11.0	6.0	5.0	5.5	4.5	3.5	4.0
29				10.5	7.0	9.0	6.5	5.0	6.0	4.5	3.5	4.0
30				6.5	5.0	6.0	6.5	5.5	6.0	3.5	2.5	2.5
31				---	---	---	6.0	5.0	5.5	3.0	2.0	2.5
MONTH				14.5	5.0	9.0	9.5	2.5	6.0	7.5	1.0	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.5	2.0	3.0	2.0	2.5	9.0	6.0	7.5	12.5	11.5	12.0
2	1.5	.5	1.5	3.0	2.0	2.5	10.0	7.0	8.5	14.5	12.0	13.5
3	2.5	1.0	1.5	4.0	2.0	3.0	11.5	8.5	10.0	16.0	13.5	14.5
4	3.5	2.0	2.5	5.5	3.0	4.5	12.0	10.5	11.0	17.0	15.0	16.0
5	3.5	2.5	3.0	7.0	5.5	6.0	12.0	10.5	11.0	18.5	15.0	16.5
6	3.5	2.5	3.0	8.0	6.5	7.0	13.0	10.0	11.5	19.5	16.5	18.0
7	4.5	3.0	3.5	8.5	6.0	7.5	13.5	11.0	12.5	19.5	17.0	18.5
8	4.5	3.5	4.0	10.0	8.0	9.0	14.5	12.5	13.5	18.5	15.0	16.5
9	4.5	3.5	4.0	11.0	9.5	10.0	13.5	13.0	13.5	15.0	13.5	14.5
10	5.0	4.0	4.5	10.0	7.5	9.0	15.0	13.0	14.0	15.0	12.0	13.5
11	4.5	3.0	4.0	9.5	7.5	8.5	15.5	13.5	14.5	15.5	13.5	14.5
12	5.0	4.0	4.5	7.0	5.5	6.0	15.5	13.5	14.5	17.0	14.5	15.5
13	4.5	3.5	4.0	5.5	4.5	5.0	16.5	15.0	16.0	19.0	16.0	17.5
14	5.0	3.0	4.0	5.0	3.5	4.5	16.0	14.0	14.5	19.0	17.0	18.5
15	5.5	4.5	5.0	5.5	3.0	4.0	15.5	14.0	14.5	18.0	16.0	17.0
16	6.0	5.0	5.5	6.5	4.0	5.0	14.0	10.5	12.5	17.0	14.5	16.0
17	4.5	3.0	4.0	9.0	6.0	7.0	12.0	9.0	10.5	16.5	14.5	15.5
18	4.0	2.5	3.0	10.5	9.0	9.5	13.5	10.0	11.5	16.0	15.5	15.5
19	5.0	3.0	4.0	10.0	7.5	9.0	15.0	11.5	13.0	---	---	---
20	6.0	4.0	5.0	9.5	8.0	9.0	16.0	12.0	14.0	---	---	---
21	7.5	5.5	6.5	10.5	9.5	10.0	17.0	14.5	15.5	---	---	---
22	7.0	7.0	7.0	9.5	7.0	8.0	16.0	13.5	14.5	---	---	---
23	7.5	6.0	7.0	9.0	6.0	7.5	15.5	12.5	14.0	---	---	---
24	8.0	6.5	7.0	8.0	7.0	7.5	16.5	13.0	14.5	---	---	---
25	7.0	5.5	6.5	7.5	7.5	7.5	16.5	14.0	15.5	---	---	---
26	6.0	4.0	5.0	8.0	6.5	7.5	15.5	13.5	14.5	---	---	---
27	5.0	3.0	4.0	9.0	7.0	8.0	13.5	12.5	13.0	---	---	---
28	4.5	3.5	4.0	9.0	7.5	8.5	13.0	12.5	12.5	---	---	---
29	4.0	3.0	3.5	9.5	8.5	9.0	13.0	12.0	12.5	---	---	---
30	---	---	---	10.0	9.0	9.5	12.5	11.5	12.0	---	---	---
31	---	---	---	10.0	7.0	8.5	---	---	---	---	---	---
MONTH	8.0	.5	4.0	11.0	2.0	7.0	17.0	6.0	13.0	19.5	11.5	16.0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

TEMPERATURE, WATER (DEG. C). WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.5	2.0	3.0	2.0	2.5	9.0	6.0	7.5	12.5	11.5	12.0
2	1.5	.5	1.5	3.0	2.0	2.5	10.0	7.0	8.5	14.5	12.0	13.5
3	2.5	1.0	1.5	4.0	2.0	3.0	11.5	8.5	10.0	16.0	13.5	14.5
4	3.5	2.0	2.5	5.5	3.0	4.5	12.0	10.5	11.0	17.0	15.0	16.0
5	3.5	2.5	3.0	7.0	5.5	6.0	12.0	10.5	11.0	18.5	15.0	16.5
6	3.5	2.5	3.0	8.0	6.5	7.0	13.0	10.0	11.5	19.5	16.5	18.0
7	4.5	3.0	3.5	8.5	6.0	7.5	13.5	11.0	12.5	19.5	17.0	18.5
8	4.5	3.5	4.0	10.0	8.0	9.0	14.5	12.5	13.5	18.5	15.0	16.5
9	4.5	3.5	4.0	11.0	9.5	10.0	13.5	13.0	13.5	15.0	13.5	14.5
10	5.0	4.0	4.5	10.0	7.5	9.0	15.0	13.0	14.0	15.0	12.0	13.5
11	4.5	3.0	4.0	9.5	7.5	8.5	15.5	13.5	14.5	15.5	13.5	14.5
12	5.0	4.0	4.5	7.0	5.5	6.0	15.5	13.5	14.5	17.0	14.5	15.5
13	4.5	3.5	4.0	5.5	4.5	5.0	16.5	15.0	16.0	19.0	16.0	17.5
14	5.0	3.0	4.0	5.0	3.5	4.5	16.0	14.0	14.5	19.0	17.0	18.5
15	5.5	4.5	5.0	5.5	3.0	4.0	15.5	14.0	14.5	18.0	16.0	17.0
16	6.0	5.0	5.5	6.5	4.0	5.0	14.0	10.5	12.5	17.0	14.5	16.0
17	4.5	3.0	4.0	9.0	6.0	7.0	12.0	9.0	10.5	16.5	14.5	15.5
18	4.0	2.5	3.0	10.5	9.0	9.5	13.5	10.0	11.5	16.0	15.5	15.5
19	5.0	3.0	4.0	10.0	7.5	9.0	15.0	11.5	13.0	---	---	---
20	6.0	4.0	5.0	9.5	8.0	9.0	16.0	12.0	14.0	---	---	---
21	7.5	5.5	6.5	10.5	9.5	10.0	17.0	14.5	15.5	---	---	---
22	7.0	7.0	7.0	9.5	7.0	8.0	16.0	13.5	14.5	---	---	---
23	7.5	6.0	7.0	9.0	6.0	7.5	15.5	12.5	14.0	---	---	---
24	8.0	6.5	7.0	8.0	7.0	7.5	16.5	13.0	14.5	---	---	---
25	7.0	5.5	6.5	7.5	7.5	7.5	16.5	14.0	15.5	---	---	---
26	6.0	4.0	5.0	8.0	6.5	7.5	15.5	13.5	14.5	---	---	---
27	5.0	3.0	4.0	9.0	7.0	8.0	13.5	12.5	13.0	---	---	---
28	4.5	3.5	4.0	9.0	7.5	8.5	13.0	12.5	12.5	---	---	---
29	4.0	3.0	3.5	9.5	8.5	9.0	13.0	12.0	12.5	---	---	---
30	---	---	---	10.0	9.0	9.5	12.5	11.5	12.0	---	---	---
31	---	---	---	10.0	7.0	8.5	---	---	---	---	---	---
MONTH	8.0	.5	4.0	11.0	2.0	7.0	17.0	6.0	13.0	19.5	11.5	16.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	52	50	52	84	80	83	68	68	68	90	88	89
2	57	52	55	85	84	84	72	67	69	90	88	89
3	59	55	57	85	72	78	76	71	72	91	89	90
4	60	58	59	71	68	70	77	74	76	91	90	91
5	60	58	59	69	68	68	78	76	77	91	88	90
6	59	59	59	69	68	68	83	77	81	92	88	90
7	62	59	61	68	67	67	77	69	73	101	90	93
8	67	62	65	69	67	68	72	70	71	98	91	93
9	73	68	71	70	69	69	72	70	71	118	97	104
10	73	57	66	72	70	71	72	71	71	117	104	108
11	56	52	53	71	62	67	76	71	73	112	103	106
12	58	53	56	61	56	58	81	76	78	107	77	84
13	62	58	60	60	56	57	81	77	79	87	79	82
14	60	59	60	64	60	63	77	72	74	95	87	92
15	66	59	63	65	64	65	75	71	74	96	90	94
16	69	66	68	66	65	65	77	75	76	91	87	89
17	69	69	69	67	66	66	79	77	78	87	85	86
18	70	68	69	68	67	67	81	78	80	86	82	85
19	73	70	71	69	68	68	84	81	82	82	77	80
20	74	72	73	69	68	69	85	83	84	81	78	79
21	74	73	74	71	69	70	88	83	84	85	81	84
22	74	72	73	72	70	71	102	88	94	84	79	82
23	75	73	74	77	72	74	102	87	91	79	76	77
24	76	73	75	77	75	76	88	84	85	80	78	78
25	75	72	73	77	76	77	85	80	83	84	78	82
26	74	71	73	77	71	74	83	79	81	84	81	83
27	75	73	74	70	66	68	83	82	83	87	84	86
28	77	75	76	68	67	67	85	84	85	90	87	89
29	77	76	76	69	68	69	88	85	87	90	89	90
30	80	77	78	69	68	68	91	87	89	93	89	91
31	81	79	80	---	---	---	91	88	90	93	92	93
MONTH	81	50	67	85	56	70	102	67	79	118	76	89

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi (0.8 km) upstream from Deep Run, and 20.9 mi (33.6 km) upstream from mouth.

DRAINAGE AREA.--154 mi² (399 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 04...	1030	358	49	4.8	18.0	7.2	.0	240	23	9
FEB 06...	1030	175	96	5.6	2.0	--	1.0	--	--	10
MAR 26...	1330	533	52	4.7	8.0	9.4	.6	--	--	9
MAY 21...	1130	231	52	5.5	17.0	8.4	2.0	130	80	9
JUL 10...	1130	148	53	5.6	21.0	9.8	--	170	330	9
AUG 28...	1045	93	54	6.2	21.5	7.9	2.2	50	20	9

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 04...	1.8	1.0	3.8	1.2	5	0	4	.0	5.9	6.8
FEB 06...	2.1	1.1	5.0	1.2	4	0	3	--	8.4	8.3
MAR 26...	1.9	1.0	3.6	1.0	2	0	2	--	8.8	5.8
MAY 21...	1.8	1.1	5.2	1.0	5	0	4	.1	5.9	7.2
JUL 10...	1.8	1.0	4.5	1.0	5	0	4	--	5.9	7.2
AUG 28...	1.9	1.0	4.4	1.2	5	0	4	--	6.4	7.5

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	.1	6.0	48	<1.0	.200	.49	.69	--	.14	14
FEB 06...	.1	6.6	35	E.98	.150	.12	.27	--	<.01	7.7
MAR 26...	.1	3.7	45	.27	.230	--	E.78	--	.14	13
MAY 21...	.1	5.1	46	.44	.090	.44	.53	.97	2.4	7.4
JUL 10...	.1	6.3	38	.46	.140	.46	.60	1.1	.16	9.7
AUG 28...	.1	6.7	37	.45	.080	.41	.49	.94	.13	6.1

DATE	TIME	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
OCT 04...	1030	400	.0	10	310	1	0	0	70	0	<10
MAY 21...	1130	--	--	--	210	0	--	0	30	0	--

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 04...	10	<10	<10	32	<10	1200	1000	15	10	20
MAY 21...	20	--	--	44	--	1400	--	4	--	30

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 04...	<10	<.5	.00	8	<10	0	0	20	<10	3
MAY 21...	--	.2	--	15	--	0	--	20	--	1

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	1	.0	2	2.2	.7	1.5	.0	.0	.0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ

LOCATION.--Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, on right bank at highway bridge on State Route 49, 0.2 mi (0.3 km) upstream from McNeals Branch, 0.4 mi (0.6 km) southeast of Head of River, and 3.7 mi (6.0 km) west of Tuckahoe.

DRAINAGE AREA.--30.8 mi^2 (79.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1969 to current year.

REVISED RECORDS.--WDR NJ-78-1: 1975(M), 1976(M).

GAGE.--Water-stage recorder and wooden control. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those below 5.0 ft^3/s (0.14 m^3/s), which are fair. Occasional regulation by ponds above station.

AVERAGE DISCHARGE.--10 years, 47.1 ft^3/s (1.334 m^3/s), 20.77 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 385 ft^3/s (10.9 m^3/s) Mar. 7, 1979, elevation, 6.23 ft (1.899 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Sept. 3, 13, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 210 ft^3/s (5.95 m^3/s) Jun. 16, elevation, 5.20 ft (1.585 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	31	34	32	35	26	154	147	38	57	23	1.9
2	32	31	33	32	32	27	135	153	35	44	20	1.4
3	31	42	32	31	30	29	116	124	34	42	18	1.3
4	30	57	31	30	31	31	127	99	33	47	18	1.4
5	29	48	31	34	31	35	154	83	32	41	18	2.1
6	28	41	33	34	31	37	124	73	31	35	23	6.3
7	26	38	49	33	33	35	103	67	32	32	25	5.0
8	23	36	45	37	32	34	87	65	65	30	18	3.3
9	25	35	38	36	32	33	96	64	71	30	17	2.0
10	46	35	36	32	32	32	187	61	54	36	14	1.7
11	75	48	34	37	31	44	166	59	48	52	16	2.3
12	70	82	33	75	31	40	135	58	42	44	27	1.5
13	64	85	36	70	30	44	108	66	38	36	35	1.3
14	69	68	47	57	30	128	96	61	36	30	26	1.5
15	64	58	42	50	31	111	107	56	40	27	22	3.2
16	52	50	38	45	38	76	99	54	165	25	20	5.9
17	45	45	37	43	43	64	88	44	195	27	18	3.8
18	41	42	34	44	36	88	78	57	93	34	16	13
19	38	40	33	69	33	85	75	75	68	32	16	13
20	36	38	35	66	33	68	70	54	56	27	16	9.1
21	34	37	36	55	34	83	66	70	47	24	16	6.6
22	33	36	38	50	39	128	64	66	41	26	16	7.8
23	33	35	38	69	42	101	62	60	38	66	15	7.4
24	33	34	37	65	40	82	61	54	34	71	13	5.3
25	32	34	42	56	41	143	65	51	33	45	11	14
26	31	39	44	50	42	148	66	47	32	35	8.2	34
27	31	46	38	45	36	107	76	44	32	31	7.4	20
28	31	41	35	43	34	87	98	41	30	27	6.3	13
29	31	37	33	41	32	100	110	40	34	27	6.3	11
30	31	35	32	39	---	146	105	39	67	27	5.9	11
31	30	---	32	37	---	130	---	38	---	24	5.9	---
TOTAL	1205	1324	1136	1437	995	2322	3078	2070	1594	1131	517.0	211.1
MEAN	38.9	44.1	36.6	46.4	34.3	74.9	103	66.8	53.1	36.5	16.7	7.04
MAX	75	85	49	75	43	148	187	153	195	71	35	34
MIN	23	31	31	30	30	26	61	38	30	24	5.9	1.3
CFSM	1.26	1.43	1.19	1.51	1.11	2.43	3.34	2.17	1.72	1.19	.54	.23
IN.	1.46	1.60	1.37	1.74	1.20	2.80	3.72	2.50	1.93	1.37	.62	.25

CAL YR 1979 TOTAL 23693.0 MEAN 64.9 MAX 376 MIN 19 CFSM 2.11 IN 28.62
WTR YR 1980 TOTAL 17020.1 MEAN 46.5 MAX 195 MIN 1.3 CFSM 1.51 IN 20.56

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 26...	1100	43	96	5.6	5.0	12.0	1.9	9	6	4
APR 08...	1100	88	43	4.5	14.0	9.6	1.1	5	2	4
MAY 29...	1100	42	50	4.6	17.0	9.7	.7	23	7	4
JUL 17...	1400	27	29	5.5	24.0	6.3	1.6	--	--	4
AUG 26...	1000	12	27	5.9	19.5	7.5	.9	240	920	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 26...	.9	.5	2.6	.7	2	0	2	--	5.2	5.0
APR 08...	.7	.5	2.2	.5	0	0	0	--	6.4	4.2
MAY 29...	.6	.6	2.4	.4	2	0	2	.2	3.7	4.4
JUL 17...	.8	.5	2.4	.6	5	0	4	--	3.2	4.4
AUG 26...	.9	.5	2.3	1.1	6	0	5	--	2.3	4.1

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 26...	.0	6.7	26	E.30	.110	.19	.30	--	<.01	3.9
APR 08...	.0	3.3	26	1.6	.260	.60	.86	2.5	.03	8.1
MAY 29...	.1	6.5	25	.14	.130	.30	.43	.57	<.03	6.5
JUL 17...	.0	5.8	22	<.05	.200	.27	.47	--	.15	4.4
AUG 26...	.1	8.3	23	<.05	.110	.43	.54	--	.12	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 29...	1100	160	1	0	80	0	10	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 29...	440	1	10	<.1	5	0	10	0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made a low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1980

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Hudson River basin				
01367620	Wallkill River at outflow of Lake Mohawk at Sparta, NJ	Lat 41°01'59", long 74°37'36", Sussex County, at bridge on West Shore Trail, at Sparta, 200 ft (61 m) downstream from outflow of Lake Mohawk, and 1.2 mi (1.9 km) southwest of Sparta Station.	4.38 (11.34 km^2)	1979-80	7-02-80 9-02-80	.62 .01
01368950	Black Creek near Vernon, NJ	Lat 41°13'21", long 74°28'33", Sussex County, at bridge on Maple Grange Road, 0.6 mi (1.0 km) upstream of confluence with Wawayanda Creek, 0.7 mi (1.1 km) northwest of Maple Grange, and 1.7 mi (2.7 km) northeast of Vernon.	17.3 (44.8 km^2)	1980	12-19-79 9-02-80	23 2.3
		Hackensack River basin				
01378410	Dwars Kill at Norwood, NJ	Lat 40°59'01", long 73°57'35", Bergen County, at bridge on Blanche Avenue at Norwood, 0.2 mi (0.3 km) upstream from mouth.	4.23 (10.96 km^2)	1973-80	7-02-80	1.2
01378430	Tenakill Brook tributary at Norwood, NJ	Lat 40°59'06", long 73°57'39", Bergen County, at Blanche Avenue at Norwood, 1.0 mi (1.6 km) east of Harrington Park, 1.5 mi (2.4 km) upstream from Oradell Reservoir.	2.03 (5.26 km^2)	1973-78, 1980	7-02-80	1.1
		Passaic River basin				
01381200	Rockaway River at Pine Brook, NJ	Lat 40°51'29", long 74°20'53", Morris County, at bridge on U.S. Route 46, 0.9 mi (1.4 km) west of Pine Brook, and 1.1 mi (1.8 km) upstream from Whippany River.	136 (352 km^2)	1963-70, 1972-73, 1979-80	2-26-80	75
01381800	Whippany River near Pine Brook, NJ	Lat 40°50'42", long 74°20'51", Morris County, at bridge on Edwards Road, 0.3 mi (0.5 km) above mouth, and 1.4 mi (2.1 km) southwest of Pine Brook.	68.5 (177.4 km^2)	1963-68, 1973, 1979-80	2-04-80 2-26-80	45 79
01382870	Belcher Creek at Stowaway Road at West Milford, NJ	Lat 41°07'27", long 74°22'48", Passaic County, at bridge on Stowaway Road in West Milford, at entrance to Pinecliff Lake, 2.8 mi (4.5 km) upstream from mouth.	2.44 (6.32 km^2)	1973-80	7-02-80	5.2
01382880	Belcher Creek tributary at West Milford, NJ	Lat 41°08'06", long 74°22'34", Passaic County, at bridge on Bearfort Road in West Milford, 150 ft (46 m) upstream from mouth, and 3.9 mi (6.3 km) west of Hewitt.	0.61 (1.58 km^2)	1973-77, 1979-80	7-09-80	.09

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (ft³/s)
		Passaic River basin--Continued				
01382890	Belcher Creek at West Milford, NJ	Lat 41°08'15", long 74°22'04", Passaic County, at bridge on Union Valley Road, 150 ft (46 m) downstream from Pinecliff Lake Dam, 0.4 mi (0.6 km) from West Milford, 1.6 mi (2.6 km) from mouth.	7.27 (18.83 km²)	1973-80	7-09-80	1.8
01382910	Morsetown Brook at West Milford, NJ	Lat 41°08'13", long 74°21'18", Passaic County, at bridge on Lincoln Avenue, 0.4 mi (0.6 km) upstream from mouth, 0.9 mi (1.4 km) northeast of West Milford.	1.31 (3.39 km²)	1973-80	7-02-80	.08
01382960	Green Brook near West Milford, NJ	Lat 41°09'09", long 74°21'34", Passaic County, at bridge on Union Valley Road, 0.4 mi (0.6 km) upstream from mouth, 1.6 mi (2.6 km) north of West Milford. Note: Diversions from Upper Greenwood Lake (Hudson River basin) enter stream above gage.	2.03 (5.26 km² Revised)	1973-80	7-09-80	2.3
01382990	Cooley Brook near West Milford, NJ	Lat 41°09'16", long 74°21'27", Passaic County, at bridge on Union Valley Road, 0.1 mi (0.2 km) upstream from mouth, 1.8 mi (2.9 km) north of West Milford.	1.34 (3.47 km²)	1973-80	7-09-80	1.1
		Rahway River basin				
01396030	South Branch Rahway River at Colonia, NJ	Lat 40°34'57", long 74°18'04", Middlesex County, at bridge on Dover Road in Colonia, 0.7 mi (1.1 km) northeast of Iselin, and 3.5 mi (5.6 km) northeast of Metuchen.	9.41 (24.37 km²)	1979-80	9-04-80	1.3
		Raritan River basin				
01396090	South Branch Raritan River at outlet of Budd Lake, NJ	Lat 40°51'38", long 74°45'38", Morris County, at bridge on Smithtown Road, 200 ft (60 m) northwest of U.S. Route 46 and 0.5 mi (0.8 km) downstream from Budd Lake Dam at Budd Lake.	5.03 (13.03 km²)	1964, 1973-77, 1980	4-26-80	12
01396280	South Branch Raritan River at Middle Valley, NJ	Lat 40°45'40", long 74°49'18", Morris County, at bridge on Middle Valley Road in Middle Valley Road in Middle Valley, 6.9 mi (11.1 km) downstream from Drakes Brook.	47.7 (123.5 km²)	1964-67, 1973-76, 1980	4-26-80	107
01396590	Spruce Run near High Bridge, NJ	Lat 40°40'26", long 74°55'04", Hunterdon County, at bridge on Van Syckels Corner Road, at inlet to Spruce Run Reservoir, 1.3 mi (2.1 km) northwest of High Bridge.	15.5 (40.1 km²)	1973-80	7-09-80	7.9
01396670	Mulhockaway Creek tributary at Van Syckel, NJ	Lat 40°39'05", long 74°58'13", Hunterdon County, at bridge on secondary road at Van Syckel, 0.4 mi (0.6 km) upstream from mouth.	2.76 (7.15 km²)	1973-80	7-09-80	1.5
01398260	North Branch Raritan River near Chester, NJ	Lat 40°46'16", long 74°37'34", Morris County, at bridge on State Route 24, 0.8 mi (1.3 km) upstream from Burnett Brook, and 3.8 mi (6.1 km) east of Chester.	7.57 (19.61 km²)	1964-67, 1980	4-26-80	13
01399194	Succasunna Brook at Succasunna, NJ	Lat 40°51'02", long 74°38'25", Morris County, at extension of Midland Road in Succasunna, 0.3 mi (0.5 km) upstream from Lamington River, 2.2 mi (3.5 km) north of Ironia, and 3.4 mi (5.5 km) east of Flanders.	1.72 (4.45 km²)	1977-80	7-09-80 9-02-80	.93 .03

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
Raritan River basin--Continued						
01399198	Lamington River tributary near Ironia, NJ	Lat 40°50'28", long 74°38'16", Morris County, at bridge 0.4 mi (0.6 km) upstream from Lamington River, 1.6 mi (2.6 km) north of Ironia, and 2.4 mi (3.9 km) south of Succasunna.	0.64 (1.66 km^2)	1977-80	7-09-80 9-02-80	.34 .04
01400560	Millstone River at Applegarth, NJ	Lat 40°16'28", long 74°28'22, Middlesex County, at bridge on Prospect Plains-Applegarth Road in Applegarth, 2.7 mi (4.3 km) east of Hightstown, and 5.2 mi (8.4 km) upstream from Rocky Brook.	15.0 (38.8 km^2)	1960-62, 1964, 1971-72, 1980	5-05-80	8.5
*01400850	Woodsville Brook at Woodsville, NJ	Lat 40°22'37", long 74°49'33", Mercer County, at bridge on Secondary Road, 0.3 mi (0.5 km) southeast of Woodsville, 0.8 mi (1.3 km) above mouth, and 3.4 mi (5.5 km) west of Hopewell.	1.78 (4.61 km^2)	1957-59, 1965-73, 1980	8-15-80	0
01401400	Heathcote Brook at Kingston, NJ	Lat 40°22'10", long 74°36'59", Middlesex County, at bridge on Mapleton Road, at Penn Central railroad bridge, 0.3 mi (0.5 km) south of Kingston, and 0.4 mi (0.6 km) upstream from mouth.	9.00 (23.31 km^2)	1979-80	12-06-79 9-08-80	6.2 1.5
01403330	Bound Brook at South Plainfield, NJ	Lat 40°34'43", long 74°24'45", Middlesex County, at bridge on Hamilton Road in South Plainfield, 0.5 mi (0.8 km) upstream from Cedar Brook, and 1.9 mi (3.1 km) east of New Market.	9.55 (24.73 km^2)	1979-80	7-02-80 9-04-80	6.9 3.4
01403350	Cedar Brook at South Plainfield, NJ	Lat 40°34'57", long 74°24'53", Middlesex County, at bridge on Lakeview Road in South Plainfield, 0.4 mi (0.6 km) upstream from mouth, and 2.0 mi (3.2 km) east of Dunellen.	7.10 (18.39 km^2)	1979-80	7-02-80 9-04-80	.37 .03
01404060	Ambrose Brook at Middlesex, NJ	Lat 40°34'03", long 74°31'02", Middlesex County, at dam, 900 ft (270 m) upstream from bridge on State Route 18 in Middlesex, and 0.7 mi (1.1 km) upstream from mouth.	13.9 (36.0 km^2)	1979-80	7-02-80 9-04-80	4.7 .96
01404180	Mill Brook at Highland Park, NJ	Lat 40°30'23", long 74°25'51", Middlesex County, at bridge on Harrison Street in Highland Park, 0.7 mi (1.1 km) upstream from mouth, and 0.9 mi (1.4 km) northeast of New Brunswick.	1.41 (3.65 km^2)	1979-80	7-02-80 9-04-80	.66 .56
01405240	Matchaponix Brook near Englishtown, NJ	Lat 40°19'21", long 74°21'35", Middlesex County, at bridge on Union Hill Road, 1.7 mi (2.7 km) north of Englishtown, and 2.8 mi (4.6 km) northwest of Gordons Corner.	29.1 (75.4 km^2)	1979-80	7-11-80 9-08-80	15 9.9
01405285	Barclay Brook near Englishtown, NJ	Lat 40°20'53", long 74°21'27", Middlesex County, at bridge on State Route 527 (Old Bridge-Englishtown Road), 0.6 mi (1.0 km) south of Redshaw Corner, 0.9 mi (1.4 km) upstream from mouth, and 3.5 mi (5.6 km) north of Englishtown.	4.94 (12.80 km^2)	1979-80	7-11-80 9-09-80	.64 .22
01405335	Manalapan Brook near Manalapan, NJ	Lat 40°16'45", long 74°22'53", Monmouth County, at bridge on South Main Street, 1.8 mi (2.9 km) northeast of Manalapan, 1.8 mi (2.9 km) southwest of Englishtown, and 5.6 mi (9.0 km) southeast of Jamesburg.	16.0 (43.8 km^2)	1979-80	7-11-80 9-08-80	7.8 5.1

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin--Continued				
01405470	Iresick Brook at East Spotswood, NJ	Lat 40°23'35", long 74°21'36", Middlesex County, at bridge on Route 527 in East Spotswood, 0.6 mi (1.0 km) above mouth, and 1.4 mi (2.3 km) south of Old Bridge.	2.29 (5.93 km^2)	1973-77, 1980	7-11-80	.13
		Manasquan River basin				
*01407830	Manasquan River near Georgia, NJ	Lat 40°12'36", long 74°16'41", Monmouth County, at bridge on Jacksons Mill Road, 0.5 mi (0.8 km) upstream from DeBois Creek, 0.9 mi (1.4 km) southwest of intersection of Jacksons Mill Road with State Route 524, 1.3 mi (2.1 km) southwest of Adelphia, and 1.6 mi (2.6 km) north of Georgia.	10.6 (27.5 km^2)	1966, 1969-74, 1980	1-24-80 5-02-80	19 21
		Mullica River basin				
*01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Camden County, 50 ft (15 m) downstream from Jackson-Medford Road and 1.8 mi (2.9 km) northeast of Pennsylvania-Reading Seashore Lines railroad and Atco Street in Atco.	3.22 (8.34 km^2)	1975-80	7-03-80 9-03-80	2.5 .39
01409390	Mullica River at Atsion, NJ	Lat 39°44'19", long 74°43'20", Burlington County, at Central Railroad of New Jersey bridge in Atsion, 500 ft (152 m) downstream from Wesickaman Creek, and 0.3 mi (0.5 km) southeast of Atsion.	33.1 (85.7 km^2)	1975-80	7-02-80 9-03-80	32 12
01409402	Hays Mill Creek near Chesilhurst, NJ	Lat 39°45'02", long 74°50'28", Camden County, at bridge on Tremont Avenue, 0.5 mi (0.8 km) upstream from Cooper Branch, 2.0 mi (3.2 km) northeast of Chesilhurst and 2.8 mi (4.5 km) southeast of Atco.	7.13 (18.47 km^2)	1974-80	7-03-80	12
*01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old White Horse Pike, 0.6 mi (1.0 km) north of Chesilhurst, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.6 km) southeast of Atco.	1.03 (2.67 km^2)	1974-80	7-03-80	.36
01409404	Sleeper Branch near Atsion, NJ	Lat 39°42'46", long 74°44'36", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Clark Branch, 0.6 mi (1.0 km) south of Dutchtown, and 2.1 mi (3.4 km) south of Atsion.	18.2 (47.1 km^2)	1975-80	7-02-80	5.0
01409405	Clark Branch near Atsion, NJ	Lat 39°42'42", long 74°44'39", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Sleeper Branch, 0.7 mi (1.1 km) south of Dutchtown, and 2.2 mi (3.5 km) south of Atsion.	7.12 (18.44 km^2)	1975-80	7-02-80	19
01409406	Sleeper Branch at Batsto, NJ	Lat 39°38'48", long 74°39'39", Atlantic County, at footbridge 600 ft (180 m) upstream from Mullica River, and 0.6 mi (1.0 km) northwest of Batsto.	36.1 (93.5 km^2)	1975-80	7-02-80	7.4
01409407	Pump Branch near Blue Anchor, NJ	Lat 39°42'22", long 74°53'04", Camden County, at highway bridge, 0.4 mi (0.6 km) upstream from Hobb Lake, and 1.2 mi (1.9 km) north of Blue Anchor.	6.20 (16.06 km^2)	1974-80	7-03-80	4.9

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Mullica River basin--Continued				
*01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, on upstream left side of bridge on Spring Garden Road, 1.8 mi (2.9 km) east of Blue Anchor, 1.8 mi (2.9 km) north of Winslow, and 2.2 mi (3.5 km) upstream from Albertson Brook.	3.01 (7.80 km^2)	1974-80	7-03-80	2.0
01409410	Albertson Brook near Hammonton, NJ	Lat 39°41'41", long 74°45'21", Atlantic County, at bridge on U.S. Route 206, 3.1 mi (5.0 km) downstream from confluence of Pump Branch and Blue Anchor Brook, 3.5 mi (5.6 km) south of Atsion, and 5.2 mi (8.4 km) northeast of Hammonton.	19.3 (50.0 km^2)	1975-80	7-02-80 9-03-80	26 14
01409411	Nescochague Creek at Pleasant Mills, NJ	Lat 39°38'28", long 74°39'43", Atlantic County, at bridge on sand road in Pleasant Mills, 0.2 mi (0.3 km) upstream from Mullica River, and 0.6 mi (1.0 km) west of Batsto.	43.8 (113.4 km^2)	1975-80	7-02-80 9-03-80	63 24
01409460	Springers Brook near Atsion, NJ	Lat 39°44'26", long 74°41'02", Burlington County, at site 110 ft (34 m) upstream from unnamed left-bank tributary, 700 ft (213 m) downstream from Deep Run, and 2.8 mi (4.5 km) east of Atsion.	21.2 (54.9 km^2)	1975-77, 1980	7-02-80 9-03-80	6.7 1.5
01409575	Landing Creek at Philadelphia Avenue at Egg Harbor City, NJ	Lat 39°32'52", long 74°37'33", Atlantic County, at bridge on Philadelphia Avenue (State Route 563), 0.1 mi (0.2 km) upstream from Union Creek, 1.7 mi (2.7 km) northeast of intersection of Routes 30, 563, and 50 in Egg Harbor City, and 6.1 mi (9.8 km) upstream from mouth.	4.86 (12.59 km^2)	1974, 1976-80	7-02-80 9-03-80	6.8 2.1
01409730	West Branch Wading River near Chatsworth, NJ	Lat 39°45'43", long 74°32'27", Burlington County, at bridge on County Route 563, 0.6 mi (1.0 km) downstream from Pole Branch, and 2.9 mi (4.7 km) south of Chatsworth.	44.8 (116.0 km^2)	1975-80	7-03-80	21
01409780	Tulpehocken Creek near Jenkins, NJ	Lat 39°42'51", long 74°33'58", Burlington County, at bridge on Maxwell-Friendship Road, 0.2 mi (0.3 km) upstream from mouth, and 2.3 mi (3.7 km) northwest of Jenkins.	21.9 (56.7 km^2)	1975-80	7-03-80 9-04-80	12 6.1
01409970	Oswego River at Oswego Lake, NJ	Lat 39°43'53", long 74°29'21", Burlington County, at bridge on Little Hawkin Road at outlet of Oswego Lake, 0.6 mi (1.0 km) downstream from Breeches Branch, and 3.0 mi (4.8 km) northwest of Jenkins.	64.4 (116.7 km^2)	1975-80	7-03-80 9-04-80	46 18
		Great Egg Harbor River basin				
01410784	Great Egg Harbor River near Sicklerville, NJ	Lat 39°44'02", long 74°57'05", Camden County, at bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi (2.4 km) northeast of Sicklerville.	15.1 (39.1 km^2)	1971-80	9-11-79 2-20-80 3-24-80 7-02-80	a11 11 29 11
01410803	Fourmile Branch at Winslow Crossing, NJ	Lat 39°42'07", long 74°58'11", Camden County, at bridge on Andrews Road in Winslow Crossing, 1.4 mi (2.2 km) northeast of Williamstown, and 2.1 mi (3.4 km) upstream from Great Egg Harbor River.	6.22 (16.11 km^2)	1972-80	7-02-80	5.8

Discharge measurements made at low-flow partial-record stations during water year 1980--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Great Egg Harbor River basin--Continued				
01411053	Hospitality Branch at Berryland, NJ	Lat 39°36'31", long 74°54'34", Gloucester County, at bridge on Piney Hollow Road, 0.3 mi (0.5 km) southwest of Berryland, 1.2 mi (1.9 km) upstream of Oak Branch and 3.4 mi (5.5 km) west of Folsom.	20.0 (51.8 km^2)	1976-80	7-02-80	36
					9-04-80	9.2
01411140	Deep Run at Weymouth, NJ	Lat 39°30'26", long 74°46'56", Atlantic County, at bridge on State Highway 559, 0.3 mi (0.5 km) upstream of mouth, and 0.5 mi (0.8 km) southwest of Weymouth.	20.0 (51.8 km^2)	1976-80	7-02-80	48
					9-03-80	11

* Also a crest-stage partial-record station.

a Not previous published.

CREST-STAGE PARTIAL RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hackensack River basin					
*01377475	Musquapsink Brook near Westwood, NJ	Lat 40°59'41", long 74°03'42", Bergen County, at bridge on Pascack Road in Washington Borough, 1.5 mi (2.4 km) west of Westwood, and 5.3 mi (8.5 km) above mouth. Datum of gage before 1973 was 69.67 ft (21.235 m) National Geodetic Vertical Datum of 1929.	2.16 (5.59 km^2)	1965-80	11-26-79	b2.41	267
01377490	Musquapsink Brook at Westwood, NJ	Lat 40°59'11", long 74°02'03", Bergen County, at footbridge at Bogert Pond, 8 ft (2 m) upstream from dam near intersection of Mill Street and First Avenue in Westwood. Datum of gage is 47.67 ft (14.530 m) National Geodetic Vertical Datum of 1929.	6.53 (16.91 km^2)	1966-80	11-26-79, 4-28-80	1.47	255
*01378385	Tenakill Brook at Closter, NJ	Lat 40°58'29", long 73°58'06, Bergen County, at bridge on High Street in Closter, 0.7 mi (1.1 km) upstream from mouth. Datum of gage is 23.85 ft (7.270 m) National Geodetic Vertical Datum of 1929.	8.56 (22.17 km^2)	1965-80	4-10-80	b4.52	880
*01378590	Metzler Brook at Englewood, NJ	Lat 40°54'32", long 73°59'40", Bergen County, at bridge on Lantana Avenue in Englewood, and 1.6 mi (2.6 km) upstream from mouth. Datum of gage is 43.10 ft (13.137 m) National Geodetic Vertical Datum of 1929.	1.54 (3.99 km^2)	1965-80	4-10-80	b2.07	170
*01378615	Wolf Creek at Ridgefield, NJ	Lat 40°49'45", Long 74°00'14", Bergen County, at bridge on Clark Avenue in Ridgefield and 0.9 mi (1.4 km) upstream from mouth. Datum of gage is 12.1 ft (3.69 m) National Geodetic Vertical Datum of 1929.	1.18 (3.06 km^2)	1965-80	9-06-79, 8-04-80	bd5.52 b6.13	d470 550
		Passaic River basin					
01378690	Passaic River near Bernardsville, NJ	Lat 40°44'03", long 74°32'26", Somerset County, at bridge on U.S. Route 202, 1.8 mi (2.9 km) northeast of Bernardsville, and 3.0 mi (4.8 km) upstream from Great Brook. Datum of gage is 238.07 ft (72.564 m) National Geodetic Vertical Datum of 1929.	8.83 (22.87 km^2)	1968-80	3-21-80	b13.72	740

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Passaic River basin--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	 Gage height (feet)	 Discharge (ft^3/s)
01387880	Pond Brook at Oakland, NJ	Lat 41°01'36", long 74°14'04", Bergen County, at bridge on NJ Route 208 in Oakland, 0.2 mi (0.3 km) upstream from former site at Franklin Avenue (prior to October 1975), 0.6 mi (1.0 km) upstream from mouth, and 1.5 mi (2.4 km) northwest of Franklin Lakes. Datum of gage is 276.97 ft (84.420 m) National Geodetic Vertical Datum of 1929.	6.76 (17.51 km^2)	1968-71, 1976-80	4-21-80	2.39	304
01389030	Preakness (Signac) Brook near Preakness, NJ	Lat 40°56'55", long 74°13'25", Passaic County, at bridge on Ratzer Road, 1.0 mi (1.6 km) north of Preakness, and 2.0 mi (3.2 km) upstream from Naachtpunkt Brook.	3.24 (8.39 km^2)	1979-80	4-28-80	ab4.3	†
01389534	Peckman River at Ozone Avenue at Verona, NJ	Lat 40°50'42", long 74°14'09", Passaic County, at bridge on Ozone Avenue in Verona, 4.0 mi (6.4 km) west of Clifton and 1.0 mi (1.6 km) southwest of Cedar Grove Reservoir.	4.45 (10.07 km^2)	1979-80	4-28-80	b3.66	820
01389765	Molly Ann Brook at North Haledon, NJ	Lat 40°57'11", long 74°11'07", Passaic County, at bridge on Overlook Avenue in North Haledon, 1.5 mi (2.4 km) west of Hawthorne and 0.5 mi (0.8 km) upstream from Oldham Pond Dam.	3.89 (11.52 km^2)	1979-80	4-28-80	7.62	†
01389900	Fleischer Brook at Market Street, Elmwood Park, NJ	Lat 40°53'57", long 74°06'54", Bergen County, at culvert on Market Street in Elmwood Park (formerly East Paterson), and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is 35.31 ft (10.762 m) National Geodetic Vertical Datum of 1929.	1.37 (3.55 km^2)	1967-80	11-26-79	3.28	161
*01390450	Saddle River at Upper Saddle River, NJ	Lat 41°03'32", long 74°05'44", Bergen County, at culvert on Lake Street in Upper Saddle River, and 1.3 mi (2.1 km) downstream from Pine Brook. Datum of gage is 186.11 ft (56.726 m) National Geodetic Vertical Datum of 1929.	10.9 (28.2 km^2)	1966-80	4-28-80	b4.51	1,550
01390810	Hohokus Brook at Allendale, NJ	Lat 41°01'37", long 74°08'44", Bergen County, at bridge on Brookside Avenue in Allendale, and 0.2 mi (0.3 km) downstream from Valentine Brook. Datum of gage is 277.46 ft (84.570 m) National Geodetic Vertical Datum of 1929.	9.11 (23.60 km^2)	1969-80	4-28-80	5.97	530
01390900	Ramsey Brook at Allendale, NJ	Lat 41°01'45", long 74°08'06", Bergen County, at bridge on Brookside Avenue in Allendale and 0.6 mi (1.0 km) upstream from Hohokus Brook. Datum of gage is 270.79 ft (82.537 m) National Geodetic Vertical Datum of 1929.	2.55 (6.60 km^2)	1975-80	4-28-80	b3.19	332
01392500	Second River at Belleville, NJ	Lat 40°47'17", long 74°10'19", Essex County, on Mill Street in Branch Brook Park at Belleville, 300 ft (91 m) downstream from Franklin Avenue, and 1,100 ft (335 m) downstream from Hendricks Pond dam. Datum of gage is 62.6 ft (19.08 m) National Geodetic Vertical Datum of 1929.	11.6 (30.04 km^2)	1937-64‡, 1963-80	6-30-80	6.53	2,750

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Raritan River basin					
01397500	Walnut Brook near Flemington, NJ	Lat 40°30'55", long 74°52'52", Hunterdon County, on right bank 1.2 mi (1.9 km) northwest of Flemington, and 2.3 mi (3.7 km) upstream from mouth. Datum of gage is 267.33 ft (81.482 m) National Geodetic Vertical Datum of 1929.	2.24 (5.80 km²)	1936-61‡, 1965-80	d8-03-79 4-10-80	3.71 2.82	900 390
01400630	Millstone River at Southfield Road near Grovers Mill, NJ	Lat 40°18'12", long 74°34'33", Mercer County, at bridge on Southfield Road, 0.2 mi (0.3 km) southeast at Grovers Mill, 3.5 mi (5.6 km) southwest of Cranbury, and 3.0 mi (4.8 km) upstream of Bear Brook. Datum of gage is 62.63 ft (19.09 m) National Geodetic Vertical Datum of 1929.	41.0 (106.2 km²)	1971,1975 1979-80	9-27-75 9-06-79 4-10-80	7.4 †5.7 5.06	c940 c635 520
01400730	Millstone River at Plainsboro, NJ	Lat 40°19'27", long 74°36'51", Mercer County, on left bank 30 ft (9 m) upstream from bridge on Penn Central railroad, 100 ft (30 m) downstream from Cranbury Brook, 0.2 mi (0.3 km) upstream from Bear Brook, and 0.9 mi (1.4 km) southwest of Plainsboro. Datum of gage is 53.41 ft (16.279 m) National Geodetic Vertical Datum of 1929.	65.8 (170.4 km²)	1965-75‡, 1976-80	4-10-80	4.88	1,100
01400775	Bear Brook at Route 535 near Locust Corner, NJ	Lat 40°16'04", long 74°34'39", Mercer County, at bridge on State Route 535, 0.9 mi (1.4 km) southwest of Locust Corner, 2.0 mi (3.2 km) east of Hightstown, and 4.2 mi (6.8 km) above mouth. Datum of gage is 73.75 ft (22.479 m) National Geodetic Vertical Datum of 1929.	6.69 (17.33 km²)	1971,1975 1979-80	9-06-79 4-10-80	b5.43 b5.53	c310 360
01400822	Little Bear Brook at Penns Neck, NJ	Lat 40°19'21", long 74°37'37", Mercer County, at downstream side of bridge on Alexander Road, 0.9 mi (1.4 km) southeast of Penns Neck, 2.8 mi (4.5 km) southwest of Plainsboro and 1.0 mi (1.6 km) above mouth. Datum of gage is 53.96 ft (16.447 m) National Geodetic Vertical Datum of 1929.	1.84 (4.77 km²)	1971,1975 1979-80	4-10-80	b3.02	†
*01400850	Woodsville Brook at Woodsville, NJ	Lat 40°22'37", long 74°49'33", Mercer County, at bridge on secondary road, 0.3 mi (0.5 km) southeast of Woodsville, and 0.8 mi (1.3 km) upstream from mouth. Datum of gage is 226.7 ft (69.10 m) National Geodetic Vertical Datum of 1929.	1.78 (4.61 km²)	1957-58, 1964-80	3-21-80	2.89	230
01400900	Stony Brook at Glenmoore, NJ	Lat 40°21'55", long 74°47'14", Mercer County, at highway bridge on Spur State Route 518, 200 ft (61 m) east of tracks of CONRAIL, at Glenmoore, and 2.0 mi (3.2 km) southwest of Hopewell. Datum of gage is 159.1 ft (48.49 m) National Geodetic Vertical Datum of 1929.	17.0 (44.03 km²)	1957-80	3-21-80	b7.33	2,550

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Raritan River basin--Continued					
*01400930	Baldwin Creek at Pennington, NJ	Lat 40°20'18", long 74°47'50", Mercer County, at bridge on State Route 31, 0.8 mi (1.3 km) north of Pennington, and 0.9 mi (1.4 km) upstream from Baldwin Lake dam. Datum of gage is 161.69 ft (49.283 m) National Geodetic Vertical Datum of 1929.	1.99 (5.15 km^2)	1960-80	3-21-80	5.55	325
01400950	Hart Brook near Pennington, NJ	Lat 40°19'17", long 74°45'38", Mercer County, at culvert on Federal City Road, 1.6 mi (2.6 km) upstream of mouth, and 1.7 mi (2.7 km) southeast of Pennington. Datum of gage after July 1, 1975 is 163.32 ft (49.780 m) National Geodetic Vertical Datum of 1929.	0.57 (1.48 km^2)	1968-80	3-21-80	3.55	137
01401160	Duck Pond Run near Princeton Junction, NJ	Lat 40°17"47", long 74°38'47", Mercer County, on right bank upstream from bridge on Clarksville Road, 1.5 mi (2.4 km) southwest of Princeton Junction and 4.0 mi (6.4 km) south of Princeton. Datum of gage is 72.50 ft (22.098 m) National Geodetic Vertical Datum of 1929.	1.35 (3.50 km^2)	1980	3-21-80	3.81	†
01401200	Duck Pond Run at Clarksville, NJ	Lat 40°18'24", long 74°40'06", Mercer County, at bridge on U.S. Route 1, 0.5 mi (0.8 km) upstream from Delaware and Raritan Canal, and 0.9 mi (1.4 km) northeast of Clarksville. Datum of gage is 54.14 ft (16.502 m) National Geodetic Vertical Datum of 1929.	5.21 (13.49 km^2)	1965-80	3-21-80	3.45	135
01401301	Millstone River at Carnegie Lake at Princeton, NJ	Lat 40°22'11", long 74°37'15", Middlesex County, at right end of Carnegie Lake dam, 2.5 mi (4.0 km) northeast of Princeton. Datum of gage is 50.00 ft (15.240 m) National Geodetic Vertical Datum of 1929.	159 (412 km^2)	1926-74‡, 1977-80	3-22-80	4.71	5,200
*01401520	Beden Brook near Hopewell, NJ	Lat 40°23'02", long 74°44'28", Mercer County, at bridge on Aunt Molly Road, 0.8 mi (1.3 km) upstream from Province Line Road, 1.1 mi (1.8 km) southeast of Hopewell, and 2.6 mi (4.2 km) southwest of Blawenburg. Datum of gage is 116.43 ft (35.488 m) National Geodetic Vertical Datum of 1929.	6.07 (15.72 km^2)	1967-80	3-21-80	6.47	1,470
01401595	Rock Brook near Blawenburg, NJ	Lat 40°25'47", long 74°41'05", Somerset County, at bridge on Burnt Hill Road, 0.7 mi (1.1 km) upstream from mouth, 1.0 mi (1.6 km) northeast of Blawenburg, and 2.8 mi (4.5 km) northwest of Rocky Hill. Datum of gage is 63.45 ft (19.340 m) National Geodetic Vertical Datum of 1929.	9.03 (23.39 km^2)	1967-80	3-21-80	5.89	1,100

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Raritan River basin--Continued					
01401600	Beden Brook near Rocky Hill, NJ	Lat 40°24'52", long 74°39'02", Somerset County, at bridge on U.S. Route 206, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton. Datum of gage is 38.09 ft (11.610 m) National Geodetic Vertical Datum of 1929.	27.6 (71.5 km^2)	1967-80	3-21-80	b10.65	3,900
01401870	Six Mile Run near Middlebush, NJ	Lat 40°28'12", long 74°32'42", Somerset County, at bridge on South Middlebush Road, 1.6 mi (2.6 km) upstream from mouth, and 2.1 mi (3.4 km) south of Middlebush. Datum of gage is 39.91 ft (12.165 m) National Geodetic Vertical Datum of 1929.	10.7 (27.7 km^2)	1966-80	4-28-80	6.39	465
01403395	Blue Brook at Seeleys Pond Dam near Berkely Heights, NJ	Lat 40°40'02", long 74°24'13", Union County, on wall on right bank, upstream from Seeleys Pond spillway, 1.0 mi (1.6 km) north of Scotch Plains, 1.0 mi (1.6 km) west of mountainside, and 300 ft (91 m) above mouth.	3.59 (9.30 km^2)	1980	6-30-80	g4.22	82
01403400	Green Brook at Seeley Mills, NJ	Lat 40°39'53", long 74°23'10", Union County, at ruins of Seeley Mills, 0.1 mi (0.2 km) downstream of Blue Brook, 0.5 mi (0.8 km) northwest of intersection of Westfield Road, and U.S. Route 22 in Scotch Plains, and 2.5 mi (4.0 km) southeast of Berkeley Heights.	6.28 (16.27 km^2)	1969-80	4-02-70	8.36	c270
					8-28-71	12.32	c4,900
					11-29-71	8.15	c196
					12-21-73	9.51	c1,400
					7-14-75	11.91	c3,900
					4-01-76	8.66	c420
					3-22-77	9.30	c860
					11-08-77	9.41	c960
					3-21-80	9.15	740
01403570	Stony Brook at North Plainfield, NJ	Lat 40°37'19", long 74°26'11", Somerset County, at bridge on Green Brook Road, in North Plainfield, 100 ft (30 m) downstream of Crab Brook, and 1.4 mi (2.3 km) upstream of mouth. Datum of gage is 71.59 ft (21.821 m) National Geodetic Vertical Datum of 1929.	6.88 (17.82 km^2)	1975-80	3-21-80	b4.20	700
01407290	Big Brook at Marlboro, NJ	Lat 40°19'10", long 74°12'52", Monmouth County, downstream side of bridge on Hillsdale Road, 1.7 mi (2.7 km) east of Marlboro and 3.0 mi (4.8 km) northwest of Colts Neck.	6.42 (16.63 km^2)	1980	4-10-80	7.17	†
		Manasquan River basin					
*01407830	Manasquan River near Georgia, NJ	Lat 40°12'36", long 74°16'41", Monmouth County, at culvert on Jacksons Mill Road near Georgia, and 0.5 mi (0.8 km) upstream from Debois Creek. Datum of gage is 70.47 ft (21.479 m) National Geodetic Vertical Datum of 1929.	10.6 (27.5 km^2)	1969-80	4-10-80	9.39	225
*01408015	Mingamahone Brook at Farmingdale, NJ	Lat 40°11'38", long 74°09'42", Monmouth County, at bridge on Belmar Road in Farmingdale, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 48.64 ft (14.825 m) National Geodetic Vertical Datum of 1929.	6.22 (16.11 km^2)	1969-80	4-10-80	5.89	245

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Raritan River basin--Continued					
*01408030	Manasquan River at Allenwood, NJ	Lat 40°08'35", long 74°07'03", Monmouth County, at bridge on Hospital Road at Allenwood, and 1.5 mi (2.4 km) downstream from Mill Run.	63.9 (165.5 km^2)	1969-80	9-18-80	b10.95	3,450
		Mullica River basin					
**01409000	Cedar Creek at Lanoka Harbor, NJ	Lat 39°52'03", long 74°10'10", Ocean County, at bridge on State Route 9 in Lanoka Harbor, 0.6 mi (1.0 km) south of Toms River, and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	56.0 (145.0 km^2)	1932-58‡, 1970-71‡, 1979-80	2-26-79 4-10-80	de4.24 3.18	† 310
*01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Burlington County, on left bank of small lake 50 ft (15 m) downstream from bridge on Jackson-Medford Road, 0.7 mi (1.1 km) north of intersection of Route 534 with Jackson-Medford Road, and 1.6 mi (2.6 km) east of Atco. Datum of gage is 102.90 ft (31.364 m) National Geodetic Vertical Datum of 1929.	3.22 (8.34 km^2)	1975-80	4-28-80	b4.48	32
*01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old White Horse Pike, 0.5 mi (0.8 km) east of Chesilhurst, and 0.9 mi (1.4 km) north of Waterford Works. Datum of gage is 98.98 ft (30.170 m) National Geodetic Vertical Datum of 1929.	1.03 (2.67 km^2)	1975-80	10-14-79	4.51	5.1
*01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, at bridge on Spring Garden Road, 4,000 ft (1,220 m) upstream of Route 30 highway bridge, 1.8 mi (2.9 km) east of Blue Anchor and 2.2 mi (3.5 km) upstream from mouth. Datum of gage is 84.94 ft (25.890 m) National Geodetic Vertical Datum of 1929.	3.01 (7.80 km^2)	1975-80	4-10-80	4.19	12.4
		Great Egg Harbor River basin					
01410810	Four Mile Branch at New Brooklyn, NJ	Lat 39°41'47", long 74°56'25", Camden County, on left bank 70 ft (21 m) upstream from bridge on Malaga Road, 0.3 mi (0. 5 km) northeast of New Brooklyn, 0.3 mi (0.5 km) upstream from mouth. Datum of gage is 101.04 ft (30.797 m) National Geodetic Vertical Datum of 1929.	7.74 (20.05 km^2)	1972-79‡, 1980	4-10-80	3.90	69

* Also a low-flow partial-record station.
** Also a tidal crest-stage station
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.
e Backwater from tide
f Peak may have been higher on Jan. 25, 1979; prior to operation of recording gage.
g Peak may have been higher on Mar. 21, 1980; prior to installation of gage.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENT AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Hudson River basin				
01367770 Wallkill River	Rondout Creek	Lat 41°11'38", long 74°34'32", Sussex County, at bridge 0.6 mi (1.0 km) upstream of Papakating Creek, 1.7 mi (2.7 km) southwest of Independence Corner, 2.0 mi (3.2 km) southeast of Sussex, and 2.1 mi (3.4 km) northwest of McAfee.	60.8 (157.5 km^2)	1977-79	12-19-79 2-27-80 5-22-80	*62 *48 *95
01367910 Papakating Creek	Wallkill River	Lat 41°12'02", long 74°35'59" Sussex County, at bridge on State Highway 23, 0.6 mi (1.0 km) south of Sussex, 2.0 mi (3.2 km) upstream from mouth, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.	59.4 (153.8 km^2)	1977-79	12-19-79	*42
		Raritan River basin				
01396535 South Branch Raritan River	Raritan River	Lat 40°39'49", long 74°53'52", Hunterdon County, at bridge on Arch Street in High Bridge, 0.9 mi (1.4 km) northeast of Mariannes Corner, and 4.3 mi (6.9 km) northeast of Norton.	68.8 (178.2 km^2)	1978-79	10-31-79 12-11-79 4-26-80	*113 *122 *165
01397380 Bushkill Brook	South Branch Raritan River	Lat 40°31'15", long 74°49'40", Hunterdon County, at bridge on River Road in Rockefellows Mills, 200 ft (60 m) upstream from mouth and 1.5 mi (2.4 km) west of Three Bridges.	4.31 (11.16 km^2)	1978-79	4-25-80	*4.1
01397400 South Branch Raritan River	Raritan River	Lat 40°31'01", long 74°48'10", Hunterdon County, at bridge on Main Street in Three Bridges, 1.4 mi (2.3 km) downstream from Bushkill Brook, and 3.0 mi (4.8 km) northeast of Flemington.	181 (469 km^2)	1969, 1975-76, 1978-79	11-29-79 3-12-80 4-28-80	425 *175 805
01398102 South Branch Raritan River	Raritan River	Lat 40°32'48", long 74°41'48", Somerset County, at bridge on South Branch Road in South Branch, and 2.0 mi (3.2 km) north of Flagtown.	265 (686 km^2)	1975-79	12-01-79 3-12-80 5-15-80	*454 *261 450
01399545 Lamington River	North Branch Raritan River	Lat 40°39'38", long 74°43'46", Somerset County, at bridge on State Route 523, 0.4 mi (0.6 km) downstream from Cold Brook, 0.6 mi (1.0 km) west of Lamington, and 3.8 mi (6.1 km) south of Potterstown.	53.6 (138.8 km^2)	1978-79	11-18-79 3-11-80 4-04-80 5-13-80	*91 *77 344 250
01400120 Raritan River	Raritan Bay	Lat 40°33'52", long 74°38'10", Somerset County, at bridge on South Branch-Raritan road in Raritan, 3.5 mi (5.6 km) northeast of South Branch, and 3.6 mi (5.8 km) southeast of North Branch.	474 (1228 km^2)	1975-79	11-12-79 3-12-80 4-12-80 5-15-80	*612 *465 1960 921
01402540 Millstone River	Raritan River	Lat 40°31'47", long 74°35'19", Somerset County, at bridge on Wilhouski Street in Weston, 0.8 mi (1.3 km) southwest of Alma White College, and 1.9 mi (3.1 km) north of Millstone.	271 (702 km^2)	1979	12-04-79 3-24-80 4-13-80 4-28-80	*255 1190 694 1750
01404302 Lawrence Brook	Raritan River	Lat 40°24'58", long 74°29'38", Middlesex County, at bridge on Davidsons Mill Road, at inflow to Farrington Lake, 1.5 mi (2.4 km) west of Paulas Corners, and 2.3 mi (3.7 km) south of Adams.	12.4 (20.0 km^2)	1979	11-27-79 3-21-80 3-22-80 5-07-80	34 26 100 *14

DISCHARGE AT PARTIAL-RECORD STAIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin--Continued				
01405302 Matchaponix Brook	South River	Lat 40°23'22", long 74°22'55", Middlesex County, at bridge on Mundy Avenue in Spotswood, 0.2 mi (0.3 km) upstream from mouth, 0.5 mi (0.8 km) east of DeVoe Lake Dam, and 3.4 mi (5.5 km) southeast of Tanners Corners.	44.1 (114.2 km^2)	-	11-27-79 12-12-79 3-21-80 3-22-80 5-01-80	317 *49 106 540 141
01405340 Manalapan Brook	South River	Lat 40°17'46", long 74°23'53", Middlesex County, at bridge on Federal Road, 4.1 mi (6.6 km) northeast of Applegarth, and 3.1 mi (5.0 km) southwest of Matchaponix.	20.9 (54.1 km^2)	1979	11-28-79 3-21-80 5-05-80	39 217 *31
		Navesink River basin				
01407253 Willow Brook	Hop Brook	Lat 40°19'47", long 74°10'26", Monmouth County, at bridge on Willow Brook Road, 1.2 mi (1.9 km) southeast of Holmdel, 1.3 mi (2.1 km) northeast of Vanderburg, and 1.6 mi (2.6 km) northwest of Sugar Loaf Hill.	7.56 (19.48 km^2)	1979	1-29-80 3-21-80 3-22-80 3-31-80 5-02-80	*11 34 59 64 21
		Manasquan River basin				
01407997 Marsh Bog Brook	Manasquan River	Lat 40°10'01", long 74°09'33", Monmouth County, at bridge on Squankum-Yellow Brook Road at Squankum, 0.2 mi (0.3 km) upstream from mouth.	4.91 (12.72 km^2)	1966, 1972,74, 1978-79	2-21-80 5-02-80	*3.3 21
		Metedeconk River basin				
01408070 North Branch Metedeconk River	Metedeconk River	Lat 40°10'52", long 74°17'17", Monmouth County, at bridge on Georgia-Jackson Mills road and 2.0 mi (3.2 km) southwest of Wyckoff Mills.	5.52 (14.30 km^2)	1966, 1978-79	2-24-80 5-22-80	*12 *6.1
		Mullica River basin				
01409387 Mullica River	Great Bay	Lat 39°44'25", long 74°43'37", Burlington County, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi (0.3 km) upstream from Wesickaman Creek.	26.7 (69.2 km^2)	-	1-28-80 5-01-80	*58 86
01409416 Hammonton Creek	Mullica River	Lat 39°38'02", long 74°43'05", Atlantic County, at bridge on Chestnut Road, 0.4 mi (0.6 km) south of Wescoatville, 1.1 mi (1.8 km) southwest of Nesco, 1.6 mi (2.6 km) upstream from Norton Branch and 3.8 mi (6.1 km) southwest of Batsto.	9.60 (24.86 km^2)	1974, 1978-79	2-05-80 5-01-80	*11 56
		Great Egg Harbor River basin				
01411110 Great Egg Harbor River	Great Egg Harbor Bay	Lat 39°30'50", long 74°46'47", Atlantic County, at bridge on U.S. Route 322 in Weymouth, 0.5 mi (0.8 km) upstream from Deep Run, and 20.9 mi (33.6 km) upstream from mouth.	154 (399 km^2)	1978-79	4-30-80	357

* Base flow.

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above National Geodetic Vertical Datum of 1929 unless otherwise noted. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD* (feet)
01406700	Raritan River at Perth Amboy, NJ	Lat 40°30'31", long 74°17'30", Middlesex County, on downstream left bank, 20 ft (5 m) downstream of Victory Bridge on State Route 35 in Perth Amboy, 0.5 mi (0.8 km) downstream from Garden State Parkway bridge, and 1.5 mi (2.4 km) upstream from mouth of Raritan River.	1967-70‡, 1980	12-20-79	b0.32
01407030	Luppatatong Creek at Keyport, NJ	Lat 40°26'08", long 74°12'27", Monmouth County, on left bank upstream side of Front Street bridge in Keyport, 0.1 mi (0.2 km) upstream from mouth, and 2.0 mi (3.2 km) northwest of Matawan.	1980	1-17-80	5.97
01408168	Barnegat Bay at Mantoloking, NJ	Lat 40°42'24", long 74°03'25", Ocean County, at east end of Herbert Street (Mantoloking Road) bridge in Mantoloking and 2.0 mi (3.2 km) south of Bay Head.	1979-80	12-20-79	3.44
01408200	Barnegat Bay at Bay Shore, NJ	Lat 39°56'56", long 74°06'52", Ocean County, at west end of State Route 37 bridge over Barnegat Bay at Bay Shore, 2.2 mi (3.5 km) west of Seaside Heights, and 4.5 mi (7.2 km) east of Toms River.	1965-80	12-20-79	2.92
01409000	Cedar Creek at Lanoka Harbor, NJ	Lat 39°52'03", long 74°10'10", Ocean County, at bridge on U.S. Route 9 in Lanoka Harbor, 0.6 mi (1.0 km) south of Toms River, and 2.0 mi (3.2 km) upstream from mouth.	1932-58†, 1970-71‡, 1979-80	1-17-80	2.75
01409125	Barnegat Bay at Barnegat Light, NJ	Lat 39°45'37", long 74°06'39", Ocean County, at north side of pier of U.S. Coast Guard boat basin on 7th Street (extended) in Barnegat Light Borough, 0.35 mi (0.56 km) southwest of Barnegat Lighthouse and 9.1 mi (14.6 km) northeast of Ship Bottom.	1965-80	1-17-80	4.34
01409145	Manahawkin Bay near Manahawkin, NJ	Lat 39°40'13", long 74°12'54", Ocean County, at west end of State Route 72 bridge over Manahawkin Bay, 2.5 mi (4.0 km) northwest of Ship Bottom, and 3.1 mi (5.0 km) southeast of Manahawkin.	1965-80	1-17-80	3.50
01409285	Little Egg Harbor at Beach Haven, NJ	Lat 39°33'10", long 74°15'07", Ocean County, in Beach Haven at U.S. Coast Guard station, 6.0 mi (9.7 km) southeast of Tuckerton and 7.4 mi (11.9 km) southeast of Ship Bottom.	1979-80	9-25-80	4.12
01409290	Tuckerton Cove near Tuckerton, NJ	Lat 39°34'35", long 74°19'50", Ocean County, on bulkhead piling of Tuckerton Cove at the southern end of State Route 539, 0.4 mi (0.6 km) east of mouth of Tuckerton Creek, and 1.9 mi (3.1 km) south of Tuckerton.	1965-73, 1974-80	1-17-80	4.23

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS--Continued

				Annual maximum	
Station No.	Station name	Location	Period of record	Date	Elevation NGVD* (feet)
01409510	Batsto River at Pleasant Mills, NJ	Lat 39°37'55", long 74°38'40", Ocean County, on right bank, 0.5 mi (0.8 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Pleasant Mills.	1958-80‡	1-17-80	4.15
01410100	Mullica River near Port Republic, NJ	Lat 39°33'12", long 74°27'46", Atlantic County, on right bank on bulkhead piling at south end of U.S. Route 9 and Garden State Parkway bridge over Mullica River, 2.8 mi (4.5 km) northeast of Port Republic, and 2.8 mi (4.5 km) south of New Gretna.	1965-80	1-17-80	4.09
01410500	Absecon Creek at Absecon, NJ	Lat 39°25'45", long 74°31'16", Atlantic County, on right bank 30 ft (9.1 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.	1923-29‡, 1933-38‡, 1946-80‡	1-17-80	4.74
01410570	Beach Thorofare at Atlantic City, NJ	Lat 39°21'56", long 74°26'44", Atlantic County, on west abutment south side of Pennsylvania-Reading Seashore Lines railroad swivel bridge, in Atlantic City, 0.5 mi (0.8 km) northeast of Bader Field airport and 2.7 mi (4.3 km) northeast of Ventnor City.	1978‡, 1979-80	1-17-80	5.15
01411300	Tuckahoe River at Head of River, NJ	Lat 39°18'25", long 74°49'15", Cape May County, on right bank at highway bridge on State Route 49, 0.2 mi (0.3 km) upstream from McNeals Branch, 0.4 mi (0.6 km) southeast of Head of River, and 3.7 mi (6.0 km) west of Tuckahoe.	1979-80‡	1-17-80	†
01411315	Great Egg Harbor Bay at Beesleys Point, NJ	Lat 39°17'18", long 74°37'50", Cape May County, at Atlantic City Electric Company's B. L. England Generating Station intake, 0.1 mi (0.2 km) west of south end of Route 9 bridge over Great Egg Harbor Bay, 0.7 mi (1.1 km) north of Beesleys Point, and 3.0 mi (4.8 km) west of Ocean City.	1963-78‡, 1979-80	1-17-80	4.90
01411318	Crook Horn Creek at Ocean City, NJ	Lat 39°15'09", long 74°37'44", Cape May County, at dock on property of county maintenance yard, 100 ft (30 km) south of Roosevelt Boulevard, 1.3 mi (2.1 km) southeast of Marmora, and 3.3 mi (5.3 km) southwest of city hall in Ocean City.	1979-80	1-17-80	4.04
01411320	Great Egg Harbor Bay at Ocean City, NJ	Lat 39°17'03", long 74°34'41", Cape May County, on bulkhead at west end of 7th Street (prior to October 1974, gage was located at Fifth Street), Ocean City, and 2.5 mi (4.0 km) southeast of Somers Point (revised).	1965-80	1-17-80	5.49
01411350	Ludlam Thorofare at Sea Isle City, NJ	Lat 39°09'24", long 74°42'00", Cape May County, on bulkhead at west end of 44th Street in Sea Isle City.	1978‡, 1979-80	1-17-80	5.17
01411355	Ingram Thorofare at Avalon, NJ	Lat 39°06'37", long 74°44'04", Cape May County, on bulkhead 200 ft (60 m) southwest of east end of Old Avalon Road, 1.0 mi (1.6 km) west of Avalon and 1.0 mi (1.6 km) south of Townsends Inlet.	1978‡, 1979-80	1-17-80	5.24

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Period of record	Annual maximum Date	Annual maximum Elevation NGVD* (feet)
01411360	Great Channel at Stone Harbor, NJ	Lat 39°03'26", long 74°45'53", Cape May County, on bulkhead piling at east end of bridge at west end of Borough of Stone Harbor, 3.7 mi (6.0 km) southeast of Cape May Court House, and 3.9 mi (6.3 km) southwest of Avalon.	1965-80	1-17-80	5.17
01411380	Grassy Sound at West Wildwood, NJ	Lat 39°00'25", long 74°49'47", Cape May County, on bridge piling near northeast end of Glenwood Avenue at northern tip of West Wildwood, 1.2 mi (1.9 km) northwest of Wildwood, and 2.9 mi (4.7 km) east of Rio Grande.	1965-80	1-17-80	5.31
01411390	Cape May Harbor at Cape May, NJ	Lat 38°56'54", long 74°53'26", Cape May County, on grounds of U.S. Coast Guard Receiving Center in Cape May, and 0.7 mi (1.1 km) southeast of east end of Cape May Canal.	1965-80	1-17-80	5.35

* National Geodetic Vertical Datum of 1929 (NGVD).
† Not determined.
‡ Operated as a continuous record gaging station.
a Revised.
b Gage datum; not National Geodetic Vertical Datum of 1929 datum.

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01367620 - WALLKILL R AT OUTFLOW OF LK MOHAWK AT SPARTA NJ (LAT 41 01 59 LONG 074 37 36)				
OCT , 1979				
01...	1330	--	5	--
MAR , 1980				
12...	1100	--	2	--
MAY				
06...	1200	--	10	--
19...	1245	--	3	--
JUL				
01...	0945	--	6	--
AUG				
04...	1015	--	88	--
01367700 - WALLKILL R AT FRANKLIN NJ (LAT 41 06 43 LONG 074 35 21)				
OCT , 1979				
01...	1130	--	7	--
MAR , 1980				
13...	0945	--	5	--
MAY				
05...	1130	--	5	--
19...	1130	--	6	--
JUL				
01...	1045	--	17	--
AUG				
04...	1145	--	7	--
01367770 - WALLKILL R NR SUSSEX NJ (LAT 41 11 38 LONG 074 34 32)				
DEC , 1979				
19...	1200	62	5	.84
MAR , 1980				
06...	1115	--	5	--
MAY				
05...	1000	160	14	6.0
19...	1000	78	14	2.9
JUL				
01...	1215	54	15	2.2
AUG				
04...	1245	36	6	.58
01367910 - PAPAKATING C AT SUSSEX NJ (LAT 41 12 02 LONG 074 35 59)				
MAR , 1980				
06...	1000	44	21	2.5
MAY				
05...	0845	120	28	9.1
19...	1115	52	18	2.5
JUL				
01...	1130	55	46	6.8
AUG				
04...	0945	33	48	4.3
01368950 - BLACK C NR VERNON NJ (LAT 41 13 21 LONG 074 28 33)				
OCT , 1979				
01...	1000	28	7	.53
MAR , 1980				
13...	0930	12	11	.36
APR				
24...	1130	39	11	1.2
MAY				
19...	0930	20	17	.92
JUL				
01...	0945	14	24	.91
AUG				
04...	1215	12	8	.26

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01377000 - HACKENSACK R AT RIVERVALE NJ (LAT 40 59 55 LONG 073 59 27)				
OCT , 1979				
02...	1320	55	22	3.3
NOV				
28...	1730	42	6	.68
FEB , 1980				
05...	1240	31	3	.25
01377500 - PASCACK BK AT WESTWOOD NJ (LAT 40 59 33 LONG 074 01 19)				
OCT , 1979				
02...	1135	64	21	3.6
NOV				
28...	1525	46	5	.62
01378500 - HACKENSACK R AT NEW MILFORD NJ (LAT 40 56 52 LONG 074 01 34)				
NOV , 1979				
29...	1335	.38	6	.01
01379000 - PASSAIC R NR MILLINGTON NJ (LAT 40 40 48 LONG 074 31 45)				
DEC , 1979				
28...	0845	170	3	1.4
FEB , 1980				
14...	0920	20	3	.16
01379500 - PASSAIC R NR CHATHAM NJ (LAT 40 43 31 LONG 074 23 23)				
DEC , 1979				
28...	1100	269	7	5.1
FEB , 1980				
07...	1150	43	4	.46
01379530 - CANOE BK NR SUMMIT NJ (LAT 40 44 40 LONG 074 21 20)				
DEC , 1979				
27...	1200	12	3	.10
01381000 - ROCKAWAY R BL RE AT BOONTON NJ (LAT 40 53 47 LONG 074 23 36)				
OCT , 1979				
09...	1025	125	3	1.0
01381200 - ROCKAWAY R AT PINE BROOK NJ (LAT 40 51 29 LONG 074 20 53)				
OCT , 1979				
17...	1015	227	20	12
DEC				
18...	1215	148	4	1.6
FEB , 1980				
26...	1315	75	6	1.2
01381500 - WHIPPANY R AT MORRISTOWN NJ (LAT 40 48 21 LONG 074 27 22)				
OCT , 1979				
16...	1300	51	7	.96
DEC				
12...	0945	40	3	.32
FEB , 1980				
14...	1155	26	3	.21

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01381800 - WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42 LONG 074 20 51)				
OCT , 1979				
03...	1220	336	22	20
DEC				
18...	1540	91	12	2.9
FEB , 1980				
04...	1345	45	10	1.2
MAR				
17...	1315	88	19	4.5
01381900 - PASSAIC R AT PINE BROOK NJ (LAT 40 51 45 LONG 074 19 18)				
JAN , 1980				
03...	1300	376	6	6.1
01382000 - PASSAIC R AT TWO BRIDGES NJ (LAT 40 53 50 LONG 074 16 23)				
OCT , 1979				
15...	1315	--	26	--
FEB , 1980				
04...	1050	--	7	--
01382500 - PEQUANNOCK R AT MACOPIN INTAKE DAM NJ (LAT 41 01 00 LONG 074 23 47)				
OCT , 1979				
22...	1800	4.0	2	.02
01383500 - WANAQUE R AT AWOSTING NJ (LAT 41 09 31 LONG 074 20 00)				
OCT , 1979				
23...	1200	35	1	.09
MAR , 1980				
04...	1500	11	1	.03
01384000 - WANAQUE R AT MONKS NJ (LAT 41 07 14 LONG 074 17 41)				
OCT , 1979				
23...	1445	51	2	.28
MAR , 1980				
05...	1315	16	2	.09
01387000 - WANAQUE R AT WANAQUE NJ (LAT 41 02 33 LONG 074 17 36)				
OCT , 1979				
23...	1700	18	7	.34
JAN , 1980				
29...	1025	19	4	.21
01387500 - RAMAPO RIVER NEAR MAHWAH NJ (LAT 41 05 51 LONG 074 09 48)				
JAN , 1980				
28...	1100	122	2	.66
01388000 - RAMAPO R AT POMPTON LAKES NJ (LAT 40 59 33 LONG 074 16 44)				
OCT , 1979				
22...	1535	209	6	3.4

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01388500 - POMPTON R AT POMPTON PLAINS NJ (LAT 40 58 09 LONG 074 16 56)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
22...	1100	328	7	6.2
DEC				
11...	1400	355	3	2.9

01388600 - POMPTON R AT PACKANACK LAKE NJ (LAT 40 56 36 LONG 074 16 47)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
11...	1450	696	10	19
FEB , 1980				
26...	1040	191	4	2.1
MAR				
17...	1035	205	3	1.7

01389110 - PASSAIC R AT RT 46 AT SINGAC NJ (LAT 40 53 32 LONG 074 15 58)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
24...	1430	E680	34	--
NOV				
13...	1510	E1500	21	--
DEC				
11...	1405	E800	10	--
JAN , 1980				
22...	1410	E960	8	--
FEB				
12...	1535	E350	7	--
MAR				
19...	1320	E2400	32	--

01389880 - PASSAIC R AT RT 46 AT ELMWOOD PARK NJ (LAT 40 53 37 LONG 074 07 46)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
24...	1130	E630	27	--
NOV				
13...	1235	E1600	24	--
DEC				
11...	1045	E820	7	--
JAN , 1980				
22...	1050	E960	7	--
FEB				
12...	1315	E320	4	--
MAR				
19...	1025	E2500	59	--

01390500 - SADDLE R AT RIDGEWOOD NJ (LAT 40 59 05 LONG 074 05 30)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR , 1980				
04...	1145	7.7	1	.02

01391000 - HOHOKUS BK AT HOHOKUS NJ (LAT 40 59 52 LONG 074 06 48)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR , 1980				
04...	1500	16	4	.17

01391200 - SADDLE RIVER AT FAIR LAWN, NJ (LAT 40 56 30 LONG 074 05 36)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1980				
30...	1000	--	10	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01391500 - SADDLE R AT LODI NJ (LAT 40 53 25 LONG 074 04 51)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT , 1979				
02...	0915	162	36	16
NOV				
06...	1350	66	6	1.1
DEC				
27...	0915	94	8	2.0
JAN , 1980				
30...	1225	33	6	.53

01392210 - THIRD RIVER AT PASSAIC, NJ (LAT 40 49 47 LONG 074 09 46)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV , 1979				
05...	1605	9.3	2	.05
DEC				
27...	1300	9.8	3	.08

01393450 - ELIZABETH R AT URSINO LAKE AT ELIZABETH NJ (LAT 40 40 33 LONG 074 13 22)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT , 1979				
02...	1230	39	18	1.9
JAN , 1980				
09...	1620	8.5	4	.09
FEB				
25...	1115	7.9	5	.11
MAR				
18...	0915	135	47	17

01394500 - RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11 LONG 074 18 44)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT , 1979				
11...	1040	44	11	1.3
JAN , 1980				
09...	1335	8.2	3	.07
31...	1015	5.4	2	.03
MAR				
18...	1225	181	37	18

01395000 - RAHWAY R AT RAHWAY NJ (LAT 40 37 05 LONG 074 17 00)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT , 1979				
01...	1035	29	16	1.3
15...	1115	17	16	.73
JAN , 1980				
08...	1225	8.8	10	.24
FEB				
06...	0925	7.6	4	.08
11...	1015	4.7	3	.04

01396001 - ROBINSONS BRANCH AT MAPLE AVE AT RAHWAY NJ (LAT 40 36 26 LONG 074 17 40)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT , 1979				
01...	1320	49	52	6.9
NOV				
15...	1500	14	7	.26
23...	1240	9.2	8	.20
JAN , 1980				
08...	1425	8.8	3	.07
FEB				
06...	1135	7.8	5	.11
11...	1140	6.1	4	.07

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01396090 - SB RARITAN R AT OUTLET OF BUDD LAKE NJ (LAT 40 51 38 LONG 074 45 38)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
04...	1030	22	15	.90
JAN , 1980				
30...	1000	--	6	--
MAR				
25...	0930	--	9	--
MAY				
20...	1300	8.6	27	.63
JUL				
02...	0930	--	17	--
AUG				
07...	0930	--	29	--

01396280 - SB RARITAN R AT MIDDLE VALLEY NJ (LAT 40 45 40 LONG 074 49 18)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
04...	1230	--	8	--
JAN , 1980				
30...	1115	--	3	--
MAR				
25...	1100	--	27	--
MAY				
20...	1130	--	3	--
JUL				
02...	1030	--	11	--
AUG				
07...	1045	--	6	--

01396500 - SB RARITAN R NR HIGH BRIDGE NJ (LAT 40 40 40 LONG 074 52 45)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
26...	1140	108	4	1.2
DEC				
11...	1140	119	1	.32
JAN , 1980				
28...	1200	93	2	.50
FEB				
25...	1230	100	4	1.1

01396535 - SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49 LONG 074 53 52)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
11...	1100	235	8	5.1
DEC				
11...	1330	122	1	.33
JAN , 1980				
31...	1145	109	2	.59
MAR				
25...	1230	611	30	49
MAY				
20...	1000	131	7	2.5
JUL				
02...	1130	79	9	1.9
AUG				
07...	1130	73	22	4.3

01396580 - SPRUCE RUN AT GLEN GARDNER, NJ (LAT 40 41 29 LONG 074 56 15)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980				
20...	1655	9.2	6	.15
MAR				
21...	1015	125	22	7.4

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01396588 - SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41 LONG 074 55 06)				
OCT , 1979				
11...	1300	--	7	--
APR , 1980				
07...	1115	--	11	--
MAY				
20...	0900	--	7	--
JUL				
02...	1230	--	5	--
AUG				
07...	1230	--	79	--
01396660 - MULHOCKAWAY C AT VAN SYCKEL NJ (LAT 40 38 51 LONG 074 58 09)				
OCT , 1979				
03...	1230	25	4	.27
JAN , 1980				
31...	1045	18	5	.24
FEB				
20...	1320	15	12	.49
APR				
07...	1015	33	3	.27
MAY				
20...	1000	22	3	.18
JUL				
02...	0930	7.3	3	.06
AUG				
07...	1010	3.3	5	.04
01396800 - SPRUCE RN AT CLINTON NJ (LAT 40 38 21 LONG 074 54 58)				
OCT , 1979				
03...	1330	98	2	.53
JAN , 1980				
31...	0930	55	5	.74
APR				
07...	0915	128	5	1.7
MAY				
20...	1115	9.0	4	.10
JUL				
02...	1030	84	2	.45
AUG				
07...	1050	20	5	.27
01397000 - SB RARITAN R AT STANTON NJ (LAT 40 34 21 LONG 074 52 10)				
DEC , 1979				
11...	1530	243	2	1.3
FEB , 1980				
25...	1650	168	4	1.8
01397100 - PRESCOTT BK AT ROUND VALLEY NJ (LAT 40 36 28 LONG 074 50 54)				
FEB , 1980				
07...	1015	1.3	12	.04
MAR				
26...	1015	1.2	1	.00
MAY				
20...	1300	.79	2	.00
JUL				
02...	1150	14	1	.04
AUG				
07...	1215	.51	1	.00

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01397380 - BUSHKILL BK AT ROCKEFELLOWS MILL NJ (LAT 40 31 15 LONG 074 49 40)				
OCT , 1979				
02...	1115	--	27	--
FEB , 1980				
06...	0845	--	7	--
APR				
08...	0900	--	10	--
MAY				
20...	1000	--	9	--
JUL				
02...	1045	--	14	--
AUG				
07...	0915	--	2	--
01397400 - SB RARITAN R AT THREE BRIDGES NJ (LAT 40 31 01 LONG 074 48 12)				
FEB , 1980				
06...	1015	137	4	1.5
APR				
08...	1030	442	7	8.4
MAY				
20...	1100	211	132	75
JUL				
02...	1200	176	10	4.8
AUG				
07...	1030	146	4	1.6
01398000 - NESHANIC R AT REAVILLE NJ (LAT 40 28 18 LONG 074 49 42)				
MAR , 1980				
10...	1220	16	13	.56
APR				
07...	1245	56	5	.76
MAY				
20...	0845	16	7	.30
JUL				
02...	0930	2.2	7	.04
AUG				
07...	0850	1.1	34	.10
01398045 - BACK BK TRIB NEAR RINGOES NJ (LAT 40 25 41 LONG 074 49 52)				
JAN , 1980				
22...	1300	2.1	1	.01
MAR				
10...	1535	2.2	9	.05
21...	1605	117	760	240
01398102 - SB RARITAN R AT SOUTH BRANCH NJ (LAT 40 32 48 LONG 074 41 48)				
OCT , 1979				
09...	1100	497	12	16
FEB , 1980				
13...	1030	--	4	--
APR				
08...	1145	712	6	12
MAY				
20...	1230	363	6	5.9
JUL				
02...	1330	243	11	7.2
AUG				
07...	1145	232	9	5.6
01398107 - HOLLAND BK AT READINGTON NJ (LAT 40 33 30 LONG 074 43 50)				
NOV , 1979				
09...	1200	10	41	1.1
DEC				
18...	1500	11	8	.24

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01398260 - NB RARITAN R NR CHESTER NJ (LAT 40 46 16 LONG 074 37 34)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
09...	1030	--	3	--
FEB , 1980				
20...	1100	--	3	--
APR				
09...	0930	--	223	--
MAY				
21...	1030	--	13	--
JUL				
07...	1030	--	6	--
AUG				
06...	1000	--	24	--

01398500 - NB RARITAN R NR FAR HILLS NJ (LAT 40 42 30 LONG 074 38 11)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
09...	1230	46	11	1.4
DEC				
20...	1300	40	3	.32
MAR , 1980				
05...	0945	23	2	.12
APR				
09...	1045	255	5	3.4
MAY				
21...	1230	73	3	.59
JUL				
07...	0920	25	18	1.2
AUG				
06...	1115	47	6	.76

01399120 - NB RARITAN R AT BURNT MILLS NJ (LAT 40 38 09 LONG 074 40 56)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
09...	1400	38	4	.41
MAR , 1980				
05...	1100	38	2	.21
APR				
14...	1150	340	7	6.4
MAY				
21...	1400	164	10	4.4
JUL				
07...	1230	38	29	3.0
AUG				
06...	1215	62	44	7.4

01399190 - LAMINGTON RIVER AT SUCCASUNNA, NJ (LAT 40 51 03 LONG 074 38 02)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1980				
04...	1215	11	4	.12
MAR				
03...	1520	6.2	7	.12

01399200 - LAMINGTON (BLACK) R NR IRONIA NJ (LAT 40 50 07 LONG 074 38 40)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
01...	1030	15	6	.24
JAN , 1980				
04...	1545	15	7	.28
FEB				
20...	0945	12	15	.49
MAR				
03...	1130	12	23	.75
APR				
10...	0930	92	5	1.2
MAY				
21...	1000	21	19	1.1
JUL				
07...	0915	13	7	.25
AUG				
06...	0930	21	5	.28

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01399500 - LAMINGTON (BLACK) R NR POTTERSVILLE NJ (LAT 40 43 39 LONG 074 43 50)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
01...	1230	76	61	13
JAN , 1980				
02...	1420	59	2	.32
FEB				
27...	0845	63	4	.68
27...	1410	44	6	.71
APR				
10...	1050	232	10	6.3
MAY				
21...	1130	92	28	7.0
JUL				
07...	1045	41	19	2.1
AUG				
06...	1045	25	8	.54

01399510 - UPPER COLD BK NR POTTERSVILLE NJ (LAT 40 43 16 LONG 074 45 09)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1980				
02...	1200	3.3	1	.01
MAR				
11...	1125	2.6	8	.06

01399525 - LAMINGTON TRIB NO.2 NR POTTERSVILLE NJ (LAT 40 41 40 LONG 074 43 05)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1980				
21...	1705	1.3	4	.01

01399545 - LAMINGTON R AT LAMINGTON NJ (LAT 40 39 38 LONG 074 43 46)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
01...	1330	865	115	269
FEB , 1980				
27...	1000	--	3	--
APR				
10...	1200	366	23	23
MAY				
21...	1245	171	22	10
JUL				
07...	1145	96	11	2.9
AUG				
06...	1145	96	20	5.2

01399600 - SB ROCKAWAY C TR AT LEBANON NJ (LAT 40 38 05 LONG 074 49 58)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980				
07...	0915	.82	1	.00
MAR				
26...	0900	.87	1	.00
MAY				
21...	1000	.77	2	.00
JUL				
07...	0945	.87	1	.00
AUG				
06...	0930	.77	1	.00

01399690 - SB ROCKAWAY C AT WHITEHOUSE NJ (LAT 40 37 24 LONG 074 46 01)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980				
11...	1310	9.9	4	.11
MAR				
12...	1600	13	21	.74

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01399700 - ROCKAWAY C AT WHITEHOUSE NJ (LAT 40 37 49 LONG 074 44 11)				
FEB , 1980				
19...	1350	35	4	.38
27...	1115	24	5	.32
APR				
14...	0930	147	25	9.9
MAY				
21...	1130	171	109	50
JUL				
07...	1130	60	7	1.1
AUG				
06...	1045	107	4	1.2
01399780 - LAMINGTON (BLACK) R AT BURNT MILLS NJ (LAT 40 38 04 LONG 074 41 13)				
OCT , 1979				
02...	0915	435	34	40
MAR , 1980				
05...	1200	74	11	2.2
APR				
14...	1045	445	18	22
MAY				
21...	1300	375	89	90
JUL				
07...	1245	118	8	2.5
AUG				
06...	1145	175	6	2.8
01399830 - NB RARITAN R AT NORTH BRANCH NJ (LAT 40 36 00 LONG 074 40 27)				
FEB , 1980				
12...	1650	144	2	.78
01400000 - NB RARITAN R NR RARITAN NJ (LAT 40 34 10 LONG 074 40 45)				
FEB , 1980				
13...	1530	194	3	1.6
01400120 - RARITAN R AT RARITAN NJ (LAT 40 33 52 LONG 074 38 10)				
OCT , 1979				
09...	1150	763	10	21
JAN , 1980				
16...	0945	836	7	16
APR				
10...	1000	--	121	--
01400300 - PETERS BK NR RARITAN NJ (LAT 40 35 35 LONG 074 40 00)				
DEC , 1979				
18...	1200	1.3	8	.03
01400500 - RARITAN R AT MANVILLE NJ (LAT 40 33 18 LONG 074 35 02)				
OCT , 1979				
09...	1420	923	12	30
JAN , 1980				
02...	1615	616	4	6.7
FEB				
20...	1300	301	7	5.7
26...	1500	437	7	8.3
MAR				
12...	1120	578	30	47

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01400560 - MILLSTONE R AT APPLEGARTH NJ (LAT 40 16 28 LONG 074 28 22)				
OCT , 1979				
02...	1230	--	19	--
JAN , 1980				
17...	1150	11	5	.15
01400650 - MILLSTONE R AT GROVERS MILL NJ (LAT 40 19 19 LONG 074 36 31)				
OCT , 1979				
03...	1030	--	16	--
JAN , 1980				
17...	1315	--	8	--
01401000 - STONY BK AT PRINCETON NJ (LAT 40 19 59 LONG 074 40 56)				
OCT , 1979				
16...	1000	62	6	1.0
JAN , 1980				
03...	1150	34	2	.18
16...	1450	58	5	.78
MAR				
04...	1750	16	1	.04
01401400 - HEATHCOTE BK AT KINGSTON NJ (LAT 40 22 10 LONG 074 36 59)				
OCT , 1979				
11...	1000	47	18	2.3
DEC				
06...	1550	5.0	3	.04
FEB , 1980				
19...	1420	4.4	5	.06
01401440 - MILLSTONE R AT KINGSTON NJ (LAT 40 22 24 LONG 074 37 15)				
OCT , 1979				
15...	1230	E310	27	--
FEB , 1980				
19...	1230	E106	6	--
01401600 - BEDEN BK NR ROCKY HILL NJ (LAT 40 24 52 LONG 074 39 02)				
OCT , 1979				
16...	1300	58	4	.63
JAN , 1980				
16...	1245	57	3	.46
01402000 - MILLSTONE R AT BLACKWELLS MILLS NJ (LAT 40 28 30 LONG 074 34 34)				
OCT , 1979				
23...	1420	199	10	5.4
DEC				
06...	1125	209	4	2.3
FEB , 1980				
26...	1450	224	9	5.4
01402540 - MILLSTONE R AT WESTON NJ (LAT 40 31 47 LONG 074 35 19)				
OCT , 1979				
11...	1330	1590	35	150
FEB , 1980				
20...	1000	E64	5	--
APR				
10...	1245	E4050	53	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

01403060 - RARITAN R BL CALCO DAM AT BOUND BROOK NJ (LAT 40 33 05 LONG 074 32 54)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR , 1980				
05...	1355	372	7	7.0

01403150 - WB MIDDLE BK NR MARTINSVILLE NJ (LAT 40 36 44 LONG 074 35 28)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
DEC , 1979				
20...	1100	1.2	5	.02

01403400 - GREEN BK AT SEELEY MILLS NJ (LAT 40 39 53 LONG 074 24 10)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
DEC , 1979				
27...	1515	9.2	2	.05

01403500 - GREEN BK AT PLAINFIELD NJ (LAT 40 36 53 LONG 074 25 55)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980				
13...	1110	2.0	3	.02
MAR				
12...	1300	17	6	.28

01403540 - STONY BK AT WATCHUNG NJ (LAT 40 38 12 LONG 074 27 06)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980				
19...	1750	3.0	1	.01

01404302 - LAWRENCE BK,DAVIDSONS MILL RD NR PATRICKS CORNER (LAT 40 24 58 LONG 074 29 38)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
03...	1350	30	6	.49
JAN , 1980				
17...	0925	15	6	.24

01405000 - LAWRENCE BK AT FARRINGTON DAM NJ (LAT 40 27 00 LONG 074 27 05)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1980				
29...	1615	<1.0	6	--
MAR				
05...	0940	15	4	.16

01405030 - LAWRENCE BK AT WESTONS MILLS NJ (LAT 40 28 59 LONG 074 24 45)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
04...	1300	--	13	--
FEB , 1980				
21...	1000	--	4	--

01405240 - MATCHAPONIX BK NR ENGLISHTOWN NJ (LAT 40 19 21 LONG 074 21 35)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1979				
03...	0915	48	18	2.3
JAN , 1980				
31...	0900	26	27	1.9
MAR				
24...	0910	69	17	3.2
MAY				
22...	0930	55	17	2.5
JUL				
09...	0915	18	8	.39
AUG				
11...	0930	17	7	.32

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01405285 - BARCLAY BK NR ENGLISHTOWN NJ (LAT 40 20 53 LONG 074 21 27)				
OCT , 1979				
03...	1045	16	12	.52
JAN , 1980				
31...	1030	--	16	--
MAR				
24...	1030	24	11	.71
MAY				
22...	1030	17	11	.50
JUL				
09...	1000	1.0	14	.04
AUG				
11...	1100	1.0	2	.01
01405302 - MATCHAPONIX BK AT MUNDY AVE AT SPOTSWOOD NJ (LAT 40 23 22 LONG 074 22 55)				
OCT , 1979				
03...	1230	101	18	4.9
DEC				
12...	1425	49	4	.53
12...	1515	49	5	.66
MAR , 1980				
13...	1200	66	10	1.8
APR				
17...	1030	90	25	6.1
MAY				
22...	1045	99	29	7.8
JUL				
09...	1100	E23	14	--
AUG				
11...	1100	E17	6	--
01405340 - MANALAPAN BK AT FEDERAL RD NR MANALAPAN NJ (LAT 40 17 46 LONG 074 23 53)				
OCT , 1979				
04...	1330	--	8	--
JAN , 1980				
31...	1220	33	11	.98
MAR				
24...	1140	52	23	3.2
MAY				
22...	1110	37	13	1.3
JUL				
09...	1040	14	8	.30
AUG				
11...	1215	12	7	.23
01405400 - MANALAPAN BK AT SPOTSWOOD NJ (LAT 40 23 22 LONG 074 23 27)				
NOV , 1979				
19...	1205	47	7	.89
DEC				
18...	1050	49	12	1.6
FEB , 1980				
25...	1530	61	8	1.3
01405440 - MANALAPAN BK AT BRIDGE ST AT SPOTSWOOD NJ (LAT 40 23 26 LONG 074 23 26)				
OCT , 1979				
03...	1345	--	21	--
FEB , 1980				
07...	0930	--	23	--
APR				
17...	0900	--	16	--
MAY				
22...	0915	--	15	--
JUL				
09...	0930	--	14	--
AUG				
11...	1140	--	12	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
01405500 - SOUTH R AT OLD BRIDGE NJ (LAT 40 24 22 LONG 074 22 08)				
DEC , 1979				
18...	1500	114	2	.62
FEB , 1980				
25...	1240	127	5	1.7
01405700 - SOUTH R BL DUHERNAL DAM AT OLD BRIDGE NJ (LAT 40 25 00 LONG 074 21 43)				
OCT , 1979				
04...	1120	--	12	--
FEB , 1980				
21...	1230	--	6	--
01407253 - WILLOW BK NR HOLMDEL NJ (LAT 40 19 47 LONG 074 10 26)				
OCT , 1979				
04...	0930	12	16	.52
FEB , 1980				
13...	1100	23	35	2.2
APR				
08...	1030	22	402	24
MAY				
27...	0930	14	16	.60
JUL				
08...	0945	12	26	.84
AUG				
05...	0930	7.9	17	.36
01407400 - YELLOW BK AT COLTS NECK NJ (LAT 40 17 47 LONG 074 10 16)				
OCT , 1979				
04...	1115	--	10	--
FEB , 1980				
13...	1000	--	10	--
APR				
08...	1230	--	22	--
MAY				
27...	1030	--	12	--
JUL				
08...	1045	--	6	--
AUG				
05...	1030	--	43	--
01407500 - SWIMMING R NR RED BANK NJ (LAT 40 19 10 LONG 074 06 55)				
OCT , 1979				
24...	1330	--	11	--
30...	1205	--	14	--
FEB , 1980				
13...	1215	--	6	--
MAR				
10...	1045	--	7	--
APR				
08...	1140	--	16	--
MAY				
27...	1200	--	6	--
JUL				
08...	1115	--	29	--
AUG				
05...	1115	--	4	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01407705 - SHARK R NR NEPTUNE CITY NJ (LAT 40 11 56 LONG 074 04 14)				
OCT , 1979				
24...	0930	20	19	1.0
30...	0835	14	10	.38
FEB , 1980				
14...	1015	1.2	5	.02
MAR				
06...	0910	2.8	39	.29
APR				
16...	1040	28	14	1.1
MAY				
27...	1045	9.4	9	.23
JUL				
08...	0945	3.4	5	.05
AUG				
05...	0930	3.1	9	.08
01407760 - JUMPING BK NR NEPTUNE CITY NJ (LAT 40 12 13 LONG 074 03 58)				
OCT , 1979				
24...	1130	4.2	17	.19
30...	0955	3.8	6	.06
FEB , 1980				
14...	1100	3.9	5	.05
MAR				
06...	1045	4.5	13	.16
APR				
16...	1140	19	8	.41
MAY				
27...	1230	4.9	8	.11
JUL				
08...	1130	2.4	11	.07
AUG				
05...	1100	5.7	12	.18
01407830 - MANASQUAN R NR GEORGIA NJ (LAT 40 12 36 LONG 074 16 41)				
OCT , 1979				
22...	1115	--	37	--
JAN , 1980				
30...	1200	--	24	--
APR				
02...	1030	--	27	--
MAY				
27...	1100	--	19	--
JUL				
08...	1000	--	10	--
AUG				
05...	1020	--	25	--
01407997 - MARSH BOG BK AT SQUANKUM NJ (LAT 40 10 01 LONG 074 09 33)				
OCT , 1979				
22...	1000	4.2	20	.23
JAN , 1980				
30...	1030	4.5	12	.15
APR				
02...	1200	34	16	1.5
MAY				
27...	1200	3.8	19	.19
JUL				
08...	1240	E1.1	7	--
AUG				
05...	1115	2.5	40	.27
01408000 - MANASQUAN R AT SQUANKUM NJ (LAT 40 09 47 LONG 074 09 21)				
NOV , 1979				
06...	0925	57	13	2.0
JAN , 1980				
16...	0900	70	53	10

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01408070 - NB METEDECONK R NR WYCKOFF MILLS N. J. (LAT 40 10 52 LONG 074 17 17)				
OCT , 1979				
22...	1230	6.7	75	1.4
MAR , 1980				
13...	0840	4.9	4	.05
APR				
02...	0915	38	7	.72
MAY				
27...	0930	3.0	9	.07
JUL				
08...	0910	E1.2	8	--
AUG				
05...	0920	E1.6	12	--
01408120 - NB METEDECONK R NR LAKEWOOD NJ (LAT 40 05 30 LONG 074 09 10)				
NOV , 1979				
06...	1125	58	5	.78
JAN , 1980				
16...	1145	55	28	4.2
01409095 - OYSTER C NR BROOKVILLE NJ (LAT 39 47 54 LONG 074 15 02)				
NOV , 1979				
07...	1235	29	4	.31
01409280 - WESTECUNK C AT STAFFORD FORGE NJ (LAT 39 39 55 LONG 074 19 11)				
NOV , 1979				
19...	1150	31	2	.17
01409387 - MULLICA R AT OUTLET OF ATSION LK AT ATSION NJ (LAT 39 44 25 LONG 074 43 37)				
OCT , 1979				
10...	1030	--	4	--
FEB , 1980				
20...	1230	9.2	7	.17
APR				
01...	1215	142	2	.77
MAY				
28...	1300	32	3	.26
JUL				
10...	1200	20	36	1.9
AUG				
12...	0930	16	8	.35
01409400 - MULLICA R NR BATSTO NJ (LAT 39 40 28 LONG 074 39 55)				
NOV , 1979				
20...	1000	107	4	1.2
393825074393500 - MULLICA R AT PLEASANT MILLS NJ (LAT 39 38 25 LONG 074 39 35)				
OCT , 1979				
10...	1220	--	11	--
FEB , 1980				
06...	1130	--	8	--
MAR				
26...	1130	--	20	--
MAY				
28...	1100	--	14	--
JUL				
10...	1000	--	13	--
AUG				
12...	1245	--	25	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01409416 - HAMMONTON CK AT WESCOATVILLE NJ (LAT 39 38 02 LONG 074 43 05)				
FEB , 1980				
05...	1100	12	13	.42
01409500 - BATSTO R AT BATSTO NJ (LAT 39 38 33 LONG 074 39 00)				
OCT , 1979				
10...	1320	E132	4	--
NOV				
28...	1215	148	3	1.2
JAN , 1980				
24...	1100	148	8	3.2
MAR				
26...	1030	303	3	2.5
MAY				
28...	0915	103	7	1.9
JUL				
10...	1100	72	2	.39
AUG				
12...	1330	92	4	1.0
01409810 - WEST BRANCH WADING RIVER NEAR JENKINS NJ (LAT 39 41 47 LONG 074 32 54)				
NOV , 1979				
09...	0840	121	4	1.3
01410000 - OSWEGO R AT HARRISVILLE NJ (LAT 39 39 47 LONG 074 31 26)				
OCT , 1979				
10...	1030	103	4	1.1
NOV				
30...	0855	107	10	2.9
FEB , 1980				
06...	0900	73	3	.59
APR				
01...	0840	278	4	3.0
MAY				
28...	0945	87	4	.94
JUL				
10...	1045	70	12	2.3
AUG				
12...	0900	70	5	.94
01410150 - EB BASS R NR NEW GRETNA NJ (LAT 39 37 23 LONG 074 26 30)				
OCT , 1979				
10...	1230	24	2	.13
NOV				
30...	1135	15	1	.04
JAN , 1980				
12...	1400	27	2	.15
FEB				
06...	1015	11	8	.24
APR				
01...	1030	44	2	.24
MAY				
28...	1115	16	4	.17
JUL				
10...	1145	16	2	.09
AUG				
12...	0950	17	6	.28
01410500 - ABSECON C AT ABSECON NJ (LAT 39 25 45 LONG 074 31 16)				
NOV , 1979				
15...	1125	24	3	.19

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01410784 - GREAT EGG HARBOR R NR SICKLERVILLE NJ (LAT 39 44 02 LONG 074 57 05)				
OCT , 1979				
02...	1030	57	16	2.5
JAN , 1980				
24...	1230	19	14	.72
MAR				
18...	1230	23	6	.37
01410820 - GREAT EGG HARBOR R NR BLUE ANCHOR NJ (LAT 39 40 09 LONG 074 54 49)				
OCT , 1979				
09...	1100	63	4	.68
DEC				
04...	0845	56	4	.60
JAN , 1980				
24...	1100	73	6	1.2
MAR				
18...	1030	82	4	.89
01411110 - GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50 LONG 074 46 47)				
OCT , 1979				
04...	1030	358	5	4.8
FEB , 1980				
06...	1030	175	6	2.8
01411300 - TUCKAHOE R AT HEAD OF RIVER NJ (LAT 39 18 25 LONG 074 49 15)				
NOV , 1979				
14...	1140	66	17	3.0
FEB , 1980				
26...	1100	43	7	.81

ATLANTIC COUNTY

392153074250101. Local I.D., Galen Hall Obs. Unique Well Number, 01-0037.

LOCATION.--Lat 39°21'51", long 74°24'59", Hydrologic Unit 02040302, near the intersection of Pacific and Congress Avenues, Atlantic City.

Owner: Atlantic City Water Department.

AQUIFER.--Lower ("800-foot") sand in Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 837 ft (255.1 m), screened 782 to 837 ft (238.4 to 255.1 m).

INSTRUMENTATION.--Water-level extremes recorder. January 1949 to August 1975, water-level recorder.

DATUM.--Land-surface datum is 9.54 ft (2.908 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 0.90 ft (0.274 m) above land-surface datum.

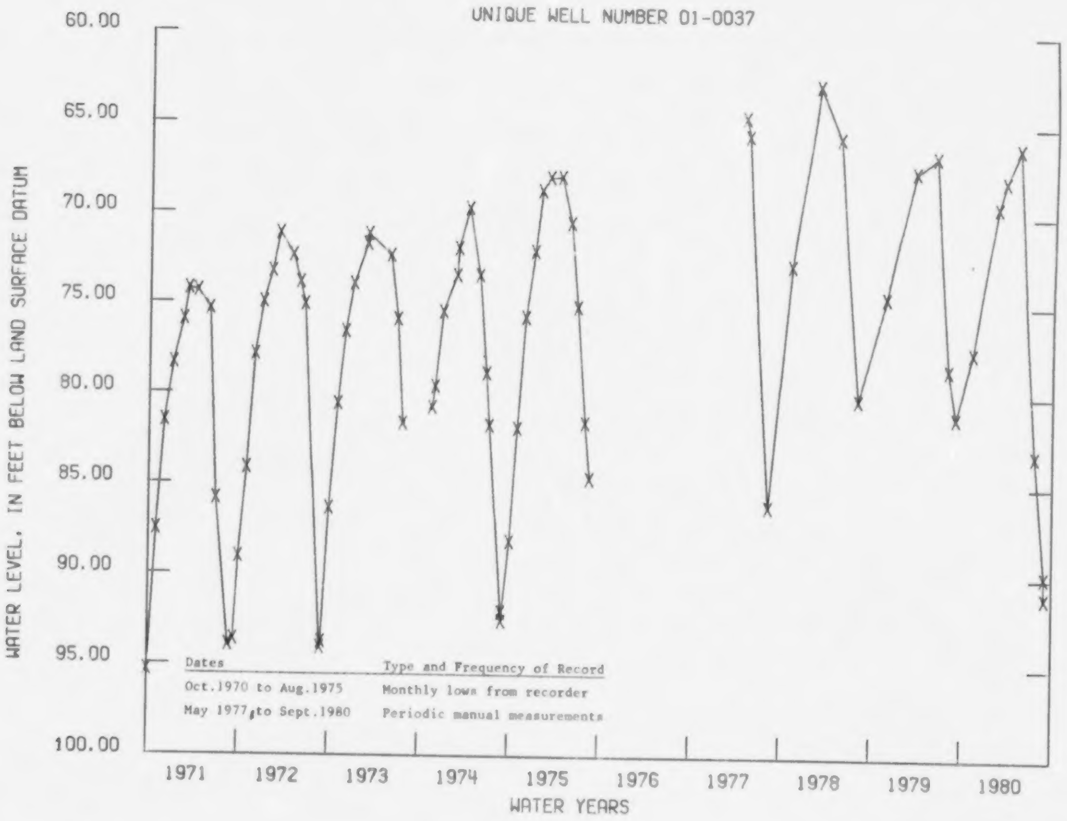
PERIOD OF RECORD.--January 1949 to August 1975, May 1977 to current year. Records for 1949 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft (16.026 m) below land-surface datum, Mar. 7, 1962; lowest water level, 96.96 ft (29.553 m) below land-surface datum, Sept. 23, 1970.

EXTREMES FOR CURRENT YEAR.--Highest water level, 65.31 ft (19.906 m) below land-surface datum, between Mar. 19 and May 6; lowest water level, 91.05 ft (27.752 m) below land-surface datum, between July 21 and Sept. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	77.54	FEB 12	69.40	MAR 13	67.94	MAR 19	67.56	MAY 6	66.13	JUL 21	83.22
AUG 31	89.87	SEP 3	91.05								



ATLANTIC COUNTY

392436074303501. Local I.D., Atlantic City W.D. 600 Obs. Unique Well Number, 01-0566.
LOCATION.--Lat 39°24'34", long 74°30'32", Hydrologic Unit 02040302, at the pumping station on Route 585 between Absecon and Pleasantville.
Owner: Atlantic City Water Department.
AQUIFER.--Lower ("800-foot") sand in Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth cased 692 ft (210.9 m), length of screen unknown.
INSTRUMENTATION.--Water-level extremes recorder. 1925 to May 1940, February 1950 to August 1974, water-level recorder.
DATUM.--Land-surface datum is 11.68 ft (3.560 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.08 ft (0.939 m) above land-surface datum.
PERIOD OF RECORD.--1925 to May 1940, February 1950 to August 1974, May 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.83 ft (4.520 m) below land-surface datum, May 28, 1925; lowest water level, 61.88 ft (18.861 m) below land-surface datum, Oct. 10, 1970.
EXTREMES FOR CURRENT YEAR.--Highest water level, 47.44 ft (14.460 m) below land-surface datum, between May 6 and Aug. 5; lowest water level, 55.55 ft (16.932 m) below land-surface datum, between Aug. 5 and Nov. 12, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	51.04	FEB 12	49.29	MAY 6	47.62	AUG 5	51.94

ATLANTIC COUNTY

393333074442401. Local I.D., Scholler Obs. 1. Unique Well Number, 01-0256.
LOCATION.--Lat 39°33'33", long 74°44'26", Hydrologic Unit 02040302, about 1.5 mi (2.4 km) southeast of Route 30 at Elwood.
Owner: Scholler Brothers Chemical Company.
AQUIFER.--Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artestian observation well, diameter 8 in (203 mm), depth 275 ft (83.8 m), screened 254 to 275 ft (77.4 to 83.8 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1962 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 93.19 ft (28.404 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.95 ft (0.899 m) above land-surface datum.
PERIOD OF RECORD.--April 1962 to August 1975, May 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft (8.284 m) below land-surface datum, Mar. 20, 1963; lowest water level, 39.56 ft (12.058 m) below land-surface datum, Sept. 13, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 34.71 ft (10.580 m) below land-surface datum, between Mar. 11 and June 18; lowest water level, 37.27 ft (11.360 m) below land-surface datum, between June 18 and Oct. 20, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 12	35.91	MAR 11	36.06	JUN 18	35.39

BURLINGTON COUNTY

395122074301701. Local I.D., Butler Place 1 Obs. Unique Well Number, 05-0683.

LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.

AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter top 8 in (203 mm), diameter bottom 6 in (152 mm), depth 2,117 ft (645.3 m), screened 2,102 to 2,117 ft (640.7 to 645.3 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 140.70 ft (42.885 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8 in (203 mm) coupling, 2.8 ft (0.85 m) above land-surface datum.

PERIOD OF RECORD.--October 1964 to August 1975, March 1977 to current year. Records for 1964 to 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 143.20 ft (43.647 m) below land-surface datum, Feb. 25, 1965; lowest water level, 172.20 ft (52.487 m) below land-surface datum, Sept. 29-30, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 169.69 ft (51.722 m) below land-surface datum, May 25, lowest water level, 172.20 ft (52.487 m) below land-surface datum, Sept. 29-30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	171.12	171.57	171.19	170.78	170.66	170.39	169.97	169.80	169.96	170.16		---
10	171.23	171.24	171.29	171.12	170.48	170.34	169.94	169.94	169.83	---		---
15	171.35	171.34	171.34	170.75	170.57	170.45	169.82	169.96	169.86	---		---
20	171.39	171.44	171.26	170.73	170.47	170.45	170.07	169.90	169.96	---		171.97
25	171.22	171.43	170.72	170.43	170.40	170.11	169.92	169.71	170.14	---		172.02
EOM	171.58	171.28	170.91	170.59	170.51	170.07	169.84	169.99	169.99	---		172.14
MEAN	171.27	171.36	171.14	170.77	170.52	170.35	170.03	169.89	169.98	---		171.99

WTR YR 1980 MEAN 170.65 HIGH 169.71 MAY 25 LOW 172.19 SEP 29

BURLINGTON COUNTY

394106074362501. Local I.D., Mount at Mount Obs. Unique Well Number, 05-0570.

LOCATION.--Lat 39°41'06", long 74°36'23", Hydrologic Unit 02040301, at Mount in Wharton State Forest.
Owner: U.S. Geological Survey.

AQUIFER.--Pleistocene-Cohansey Sand undifferentiated.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in (203 mm), depth 25 ft (7.6 m), open-end cement casing.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 63.24 ft (19.276 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of cement casing, 0.6 ft (0.18 m) above land-surface datum.

PERIOD OF RECORD--September 1955 to July 1970, October 1977 to current year. Periodic manual measurements, October 1970 to September 1977. Records for 1955 to 1970 are unpublished and are available in files of New Jersey District Office.

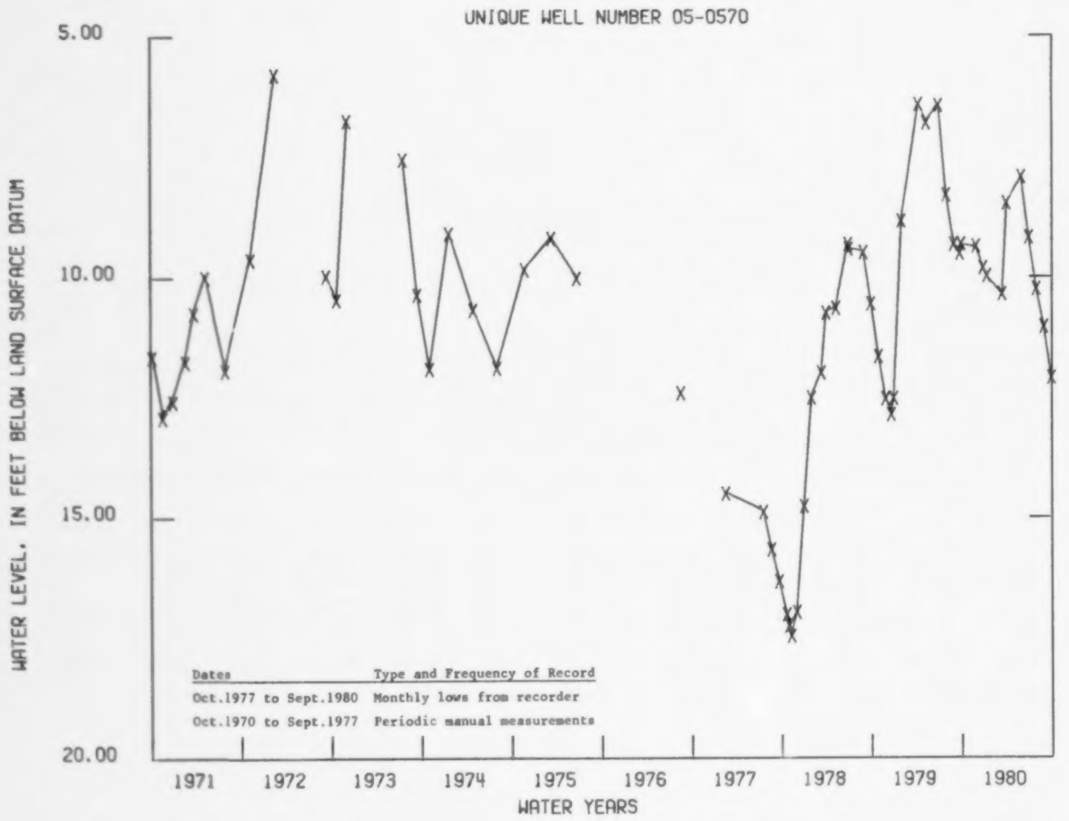
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.92 ft (0.890 m) below land-surface datum, Aug. 26, 1958; lowest water level, 18.51 ft (5.642 m) below land-surface datum, Oct. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level, 6.40 ft (1.951 m) below land-surface datum, Apr. 15; lowest water level, 12.22 ft (3.725 m) below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.25	9.23	9.45	9.85	---	---	7.73	---	8.31	9.41	10.50	11.32
10	9.18	9.32	9.62	10.08	---	10.33	7.11	---	8.51	9.58	10.62	11.48
15	8.84	9.42	9.75	9.85	---	10.49	6.46	7.43	8.67	9.76	10.74	11.67
20	8.49	9.32	9.84	9.52	---	---	---	7.58	8.86	9.96	10.86	11.87
25	8.60	9.39	9.75	9.33	---	---	---	7.70	9.09	10.15	10.99	12.04
EOM	9.05	9.48	9.91	9.31	---	8.68	---	8.04	9.26	10.37	11.15	12.21
MEAN	8.91	9.31	9.71	9.69	---	---	7.30	7.70	8.70	9.82	10.77	11.70

WTR YR 1980 MEAN 9.55 HIGH 6.46 APR 15 LOW 12.21 SEP 30



CAMDEN COUNTY

394215074561702. Local I.D., New Brooklyn Park 2 Obs. Unique Well Number, 07-0477.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 848 ft (258.5 m), screened 830 to 848 ft (253.0 to 258.5 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.10 ft (33.863 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.3 ft (1.01 m) above land-surface datum.
PERIOD OF RECORD.--January 1963 to August 1975, March 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.54 ft (40.093 m) below land-surface datum, Mar. 6, 1963; lowest water level, 186.55 ft (56.860 m) below land-surface datum, Sept. 16, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 174.12 ft (53.072 m) below land-surface datum, Apr. 15; lowest water level, 186.55 ft (56.860 m) below land-surface datum, Sept. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	177.49	177.47	176.52	175.66	175.56	175.19	174.32	174.67	177.92	181.11	183.76	185.48
10	177.49	177.13	176.49	175.81	175.38	175.12	174.24	175.28	178.10	181.10	183.56	185.94
15	177.49	177.09	176.40	175.57	175.46	175.10	174.15	175.59	178.13	181.98	183.51	186.36
20	177.49	177.08	176.28	175.56	175.42	174.98	174.36	175.91	178.49	---	183.30	186.27
25	177.38	177.01	175.69	175.36	175.36	174.60	174.66	175.96	179.47	183.94	183.43	186.11
EOM	177.52	176.72	175.80	175.51	175.40	174.43	174.73	177.17	180.85	183.91	184.63	185.72
MEAN	177.47	177.10	176.25	175.60	175.44	174.97	174.46	175.64	178.59	182.19	183.65	185.91

WTR YR 1980 MEAN 178.02 HIGH 174.15 APR 15 LOW 186.54 SEP 16

CAMDEN COUNTY

394215074561703. Local I.D., New Brooklyn Park 3 Obs. Unique Well Number, 07-0478.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Mount Laurel Sand-Wenonah Formation undifferentiated of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 530 ft (162 m), screened 520 to 530 ft (158 to 162 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.50 ft (33.985 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.1 ft (0.64 m) above land-surface datum.
PERIOD OF RECORD.--December 1962 to August 1975, March 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.53 ft (17.840 m) below land-surface datum, Dec. 18, 1962; lowest water level, 76.49 ft (23.314 m) below land-surface datum, May 17-18, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 74.15 ft (22.601 m) below land-surface datum, May 1, June 30; lowest water level, 75.60 ft (23.043 m) below land-surface datum, Oct. 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.30	75.52	75.29	75.04	74.95	74.69	74.24	74.19	74.36	74.27	74.33	74.52
10	75.36	75.32	75.36	75.25	74.79	74.65	74.21	74.31	74.25	74.29	74.33	74.45
15	75.42	75.35	75.38	74.97	74.86	74.62	74.18	74.33	74.27	74.39	74.31	74.42
20	75.48	75.44	75.34	74.95	74.78	74.68	74.39	74.29	74.30	74.38	74.35	74.54
25	75.35	75.43	74.97	74.75	74.72	74.38	74.28	74.17	74.40	74.35	74.44	74.52
EOM	75.58	75.30	75.10	74.91	74.76	74.35	74.21	74.39	74.18	74.36	74.46	74.55
MEAN	75.38	75.38	75.26	75.00	74.82	74.61	74.33	74.28	74.33	74.32	74.37	74.49

WTR YR 1980 MEAN 74.71 HIGH 74.16 MAY 1 AND OTHERS LOW 75.58 OCT 31

CAMDEN COUNTY

394215074561704. Local I.D., New Brooklyn Park 4 Obs. Unique Well Number, 07-0479.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 210 ft (64.0 m), screened 200 to 210 ft (61.0 to 64.0 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.20 ft (33.894 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--December 1962 to August 1975, March 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.41 ft (0.125 m) below land-surface datum, Feb. 27, 1979; lowest water level, 2.28 ft (0.695 m) below land-surface datum, Aug. 31, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 0.45 ft (0.137 m) below land-surface datum, Apr. 11-13; lowest water level, 1.18 ft (0.360 m) below land-surface datum, Sept. 29-30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	.65	.74	.77	.76	.77	.77	.46	.52	.77	.79	.92	1.13
10	.72	.72	.75	.78	.76	.74	.51	.61	.75	.85	.95	1.14
15	.63	.65	.75	.64	.78	.65	.47	.65	.80	.90	.96	1.16
20	.75	.72	.76	.67	.76	.70	.60	.69	.79	.90	1.01	1.16
25	.74	.77	.71	.61	.71	.56	.61	.65	.86	.91	1.05	1.16
EOM	.79	.69	.73	.74	.74	.55	.57	.78	.82	.94	1.10	1.18
MEAN	.71	.72	.74	.70	.75	.68	.54	.64	.80	.87	.99	1.15

WTR YR 1980 MEAN .77 HIGH .45 APR 12 AND OTHERS LOW 1.18 SEP 30

CUMBERLAND COUNTY

392512074521206. Local I.D., Ragovin 2100. Unique Well Number 11-0137.
LOCATION.--Lat 39°25'12", long 74°52'12", Hydrologic Unit 02040302, in wooded area off Harriet Avenue, 1.5 mi (2.4 km) southeast of Milmay.
Owner: DeRosa (Formerly: W.H. Ragovin).
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in (127 mm), depth 2,093 ft (637.9 m), screened 2,083 to 2,093 ft (634.9 to 637.9 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 85.00 ft (25.908 m) National Geodetic Vertical Datum of 1929, revised; previously published as 91 ft (27.7 m).
Measuring point: Top edge of recorder shelf, 2.4 ft (0.73 m) above land-surface datum.
PERIOD OF RECORD.--October 1974 to April 1975, February 1977 to current year. Records for 1974 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft (35.302 m) below land-surface datum, Apr. 3, 1975; lowest water level, 124.95 ft (38.085 m) below land-surface datum, Sept. 28-29, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 123.05 ft (37.506 m) below land-surface datum, Oct. 5; lowest water level, 124.95 ft (38.085 m) below land-surface datum, Sept. 28-29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.14	123.55	123.42	123.46	123.78	123.76	123.54	123.65	124.05	124.09	124.44	124.79
10	123.23	123.31	123.57	123.84	123.64	123.76	123.51	123.78	123.94	124.12	124.46	124.74
15	123.32	123.38	123.68	123.61	123.77	123.87	123.49	123.86	123.97	124.28	124.41	124.74
20	123.36	123.49	123.69	123.63	123.72	123.80	123.76	123.82	124.01	124.34	124.48	124.90
25	123.26	123.50	123.26	123.42	123.72	123.57	123.68	123.70	124.17	124.31	124.63	124.87
EOM	123.55	123.45	123.52	123.64	123.86	123.56	123.65	123.98	123.98	124.35	124.69	124.89
MEAN	123.27	123.41	123.53	123.61	123.74	123.76	123.68	123.80	124.04	124.23	124.51	124.81

WTR YR 1980 MEAN 123.87 HIGH 123.14 OCT 5 AND OTHERS LOW 124.94 SEP 28 AND OTHERS

ESSEX COUNTY

404452074211601. Local I.D., Canoe Brook 30 Obs. Unique Well Number, 13-0013.

LOCATION.--Lat 40°44'52", long 74°21'16", Hydrologic Unit 02030103, about 0.3 mi (0.5 km) north of Canoe Brook pumping station, near Chatham.

Owner: Commonwealth Water Company.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 10 in (254 mm), depth 130 ft (39.6 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 170.00 ft (51.816 m) National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 6.6 ft (2.01 m) above land-surface datum.

REMARKS.--Water levels in this well are affected by pumpage.

PERIOD OF RECORD.--1925 to May 1975, April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.25 ft (2.210 m) below land-surface datum, Aug. 25, 1931; lowest water level, 86.70 ft (26.426 m) below land-surface datum, Oct. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 68.71 ft (20.943 m) below land-surface datum, Feb. 26; lowest water level, 75.31 ft (22.954 m) below land-surfacce datum, Oct. 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	73.62	---	---	---	70.54	70.45	70.84	---	---	---	71.92	73.42
10	74.55	---	---	74.14	70.74	71.08	71.42	70.94	---	71.43	72.65	74.44
15	74.04	---	---	72.73	71.42	71.70	70.24	71.26	---	---	71.56	74.35
20	74.19	---	---	71.36	70.55	72.26	72.31	72.05	---	74.46	71.79	74.18
25	74.29	---	---	70.46	69.49	72.41	71.36	70.93	---	73.73	72.41	74.37
EOM	73.73	---	73.22	70.51	---	71.15	70.94	69.98	---	72.44	73.56	73.67
MEAN	74.18	---	---	72.10	70.46	71.42	71.38	71.09	---	73.29	72.15	74.08

WTR YR 1980 MEAN 72.26 HIGH 69.10 FEB 26 LOW 75.07 OCT 4

MERCER COUNTY

402131074461201. Local I.D., Honey Branch 10 Obs. Unique Well Number, 21-0088.

LOCATION.--Lat 40°21'28", Long 74°46'13", Hydrologic Unit 02030105, on the lands of Stony Brook-Millstone Watershed Association, near Pennington.

Owner: Stony Brook-Millstone Watershed Association.

AQUIFER.--Brunswick Shale of Triassic age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), cased to approximately 20 ft (6.1 m), depth 150 ft (45.7 m), open hole.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 179.50 ft (54.712 m) National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 4.0 ft (1.22 m) above land-surface datum.

PERIOD OF RECORD.--June 1967 to August 1975, April 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.63 ft (7.507 m) below land-surface datum, July 21, 1967; lowest water level, 27.87 ft (8.495 m) below land-surface datum, July 27, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 25.02 ft (7.626 m) below land-surface datum, Mar. 21; lowest water level, 27.87 ft (8.495 m) below land-surface datum, July 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.44	25.64	25.67	25.75	26.37	26.26	25.62	---	---	---	27.15	---
10	25.27	25.56	25.71	---	26.38	25.92	25.50	26.04	---	27.38	---	---
15	25.56	25.48	25.61	---	26.56	25.76	25.63	25.80	---	27.59	---	---
20	25.68	25.66	25.74	---	26.51	25.66	---	25.86	---	27.49	---	---
25	25.72	25.74	25.43	---	26.05	25.50	26.12	25.93	---	27.61	---	---
EOM	25.82	25.59	25.68	---	26.12	25.50	25.73	---	---	27.54	---	---
MEAN	25.56	25.60	25.64	---	26.34	25.82	25.74	25.89	---	27.46	---	---

WTR YR 1980 MEAN 26.04 HIGH 25.25 OCT 1 LOW 27.77 JUL 28

MIDDLESEX COUNTY

402553074271701. Local I.D., Robert Fischer Obs. Unique Well Number, 23-0070.

LOCATION.--Lat 40°25'55", long 74°27'19", Hydrologic Unit 02030105, about 1,800 ft (548.6 m) southeast of Weber School on Hardenburg Lane, East Brunswick Township.

Owner: Robert D. Fischer.

AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 4.5 ft (1.37 m), depth 21 ft (6.4 m), well is cased to 17 ft (5.2 m).

INSTRUMENTATION.--Water-level extremes recorder. June 1936 to April 1975, water-level recorder.

DATUM.--Land-surface datum is 73.00 ft (22.250 m) National Geodetic Vertical Datum of 1929.

Measuring point: Top of angle iron at bottom of shelter doors 1.70 ft (0.518 m) above land-surface datum.

REMARKS.--Well deepened Oct. 29, 1965 from 17 to 21 ft (5.18 to 6.40 m).

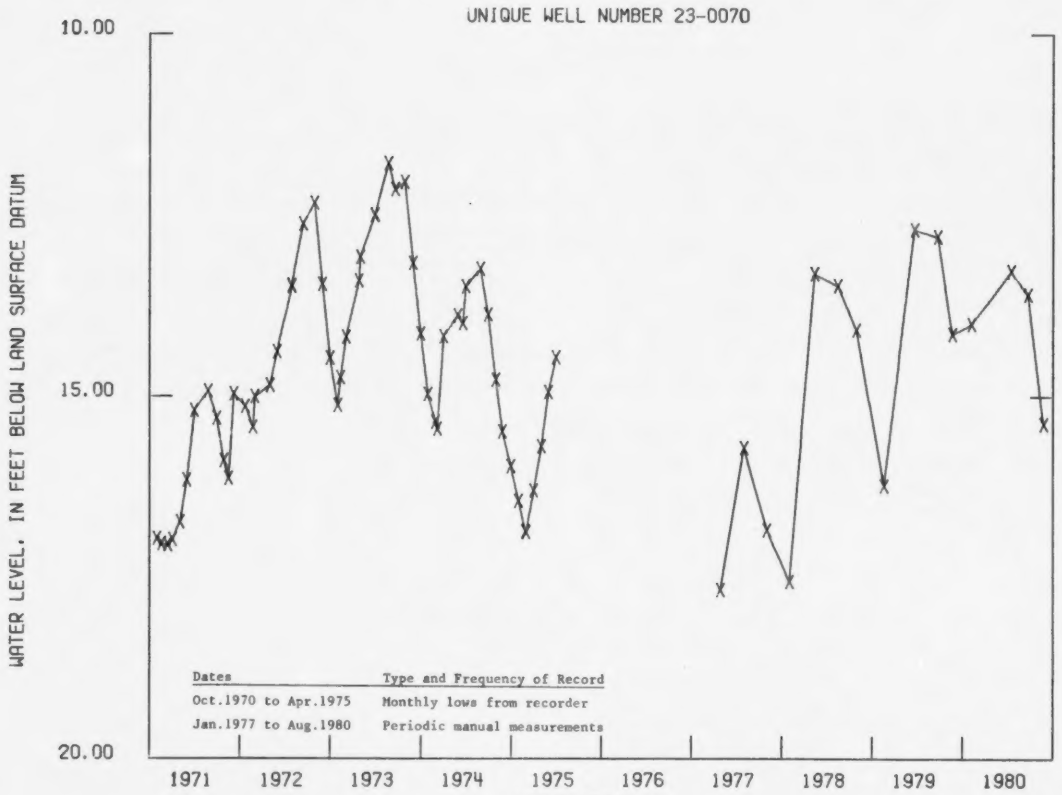
PERIOD OF RECORD.--June 1936 to April 1975, January 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft (2.707 m) below land-surface datum, Apr. 26, 27, 1939; lowest water level, 18.36 ft (5.596 m) below land-surface datum, Feb. 11, 1966, well was dry many times, 1963-1965 before deepening.

EXTREMES FOR CURRENT YEAR.--Highest water level, 12.80 ft (3.901 m) below land-surface datum, between Apr. 16 and June 23; lowest water level, 16.64 ft (5.072 m) below land-surface datum, between Aug. 25 and Oct. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	14.00	APR 16	13.27	JUN 23	13.59	AUG 25	15.38



MIDDLESEX COUNTY

402450074181801. Local I.D., Browntown Obs. Unique Well Number, 23-0182.

LOCATION.--Lat 40°24'49", long 74°18'19", Hydrologic Unit 02030105, on the east side of Route 9 about 1.0 mi (1.6 km) north of Browntown.

Owner: Old Bridge Municipal Utilities Authority (formerly Mr. Clyde Bowne).

AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 71 ft (21.6 m), perforated pipe 66 to 71 ft (20.1 to 21.6 m).

INSTRUMENTATION.--Water-level extremes recorder. November 1932 to August 1975, water-level recorder.

DATUM.--Land-surface datum is 30.58 ft (9.321 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing 3.17 ft (0.966 m) above land-surface datum.

PERIOD OF RECORD.--November 1932 to August 1975, January 1977 to current year. Records for 1932 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.44 ft (0.744 m) below land-surface datum, Apr. 9, 10, 1939; lowest water level, 14.75 ft (4.496 m) below land-surface datum, between Aug. 4, and Nov. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.28 ft (3.113 m) below land-surface datum, between Mar. 10 and May 28; lowest water level, 12.90 ft (3.932 m) below land-surface datum, between May 28 and Aug. 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	11.97	MAR 10	12.72	MAY 28	10.51	AUG 25	12.89

MIDDLESEX COUNTY

402109074301301. Local I.D., Forsgate Obs. 1-1961. Unique Well Number, 23-0291.

LOCATION.--Lat 40°21'09", long 74°30'13", Hydrologic Unit 02030105, about 0.4 mi (0.6 km) west of Route 130 on Friendship Road, South Brunswick Township.

Owner: Monroe Township Municipal Utilities Authority.

AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 203 ft (61.9 m), screened 192 to 203 ft (58.5 to 61.9 m).

INSTRUMENTATION.--Water-level extremes recorder. October 1961 to August 1975, water-level recorder.

DATUM.--Land-surface datum is 106.79 ft (32.550 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing 2.06 ft (0.628 m) above land-surface datum.

PERIOD OF RECORD.--October 1961 to August 1975, January 1977 to current year. Records for 1961 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.70 ft (7.529 m) below land-surface datum, July 5, 1973; lowest water level, 37.39 ft (11.396 m) below land-surface datum, between Nov. 1, 1977 and Feb. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Highest water level, 30.53 ft (9.306 m) below land-surface datum, between Nov. 7 and Apr. 16; lowest water level, 34.00 ft (10.363 m) below land-surface datum, between Aug. 7 and Oct. 14, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 7	30.70	APR 16	31.42	JUN 23	31.61	AUG 7	32.58

MIDDLESEX COUNTY

402015074275701. Local I.D., Forsgate Obs. 3-1961. Unique Well Number, 23-0228.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, on Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 138 ft (42.1 m), screened 128 to 138 ft (39.0 to 42.1 m).
INSTRUMENTATION.--Water-level extremes recorder. October 1961 to August 1967, August 1968 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 147.34 ft (44.909 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 1.40 ft (0.427 m) below land-surface datum.
PERIOD OF RECORD.--October 1961 to August 1967, August 1968 to August 1975, January 1977 to current year.
Records for 1961 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.32 ft (21.434 m) below land-surface datum, May 6, 1962; lowest water level, 84.85 ft (25.862 m) below land-surface datum, between Aug. 5 and Nov. 1, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 77.98 ft (23.768 m) below land-surface datum, between Nov. 8 and Apr. 16; lowest water level, 80.97 ft (24.680 m) below land-surface datum, between May 21 and Aug. 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	78.60	APR 16	78.87	MAY 21	78.43	AUG 7	80.17

MIDDLESEX COUNTY

402015074275702. Local I.D., Forsgate Obs. 4-1961. Unique Well Number, 23-0229.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, on Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 330 ft (100.6 m), screened 319 to 330 ft (97.2 to 100.6 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1965 to August 1967, August 1968 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 147.34 ft (44.909 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 1.50 ft (0.457 m) below land-surface datum.
PERIOD OF RECORD.--April 1965 to August 1967, August 1968 to August 1975, January 1977 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.09 ft (24.411 m) below land-surface datum, July 16, 1973; lowest water level, 93.24 ft (28.420 m) below land-surface datum, between Nov. 20, 1978 and Mar. 21, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 85.24 ft (25.981 m) below land-surface datum, between Nov 8 and Apr. 16; lowest water level, 90.79 ft (27.673 m) below land-surface datum, between Aug. 7 and Oct. 15, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	86.30	APR 16	86.68	MAY 21	85.80	AUG 7	89.36

MIDDLESEX COUNTY

402633074220001. Local I.D., South River 2 Obs. Unique Well Number, 23-0439.
LOCATION.--Lat 40°26'33", long 74°22'00", Hydrologic Unit 02030105, at the corner of Whitehead Avenue and Anne Street, South River.
Owner: South River Borough Water Department.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 126 ft (38.4 m), screened 121 to 126 ft (36.9 to 38.4 m).
INSTRUMENTATION.--Water-level extremes recorder. January 1968 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 20.69 ft (6.306 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 2.55 ft (0.777 m) above land-surface datum.
PERIOD OF RECORD.--January 1968 to August 1975, January 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.37 ft (12.000 m) below land-surface datum, Jan. 30, 1968; lowest water level, 73.64 ft (22.445 m) below land-surface datum, between Aug. 25 and Oct. 16, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 55.78 ft (17.002 m) below land-surface datum, between Nov. 21 and Mar. 10; lowest water level, 73.64 ft (22.445 m) below land-surface datum, between Aug. 25 and Oct. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	58.10	NOV 21	57.36	MAR 10	62.06	MAY 28	62.69	AUG 25	71.54

MIDDLESEX COUNTY

402746074314501. Local I.D., Morgan 1 Obs. Unique Well Number, 23-0404.

LOCATION.--Lat 40°27'45", long 74°16'45", Hydrologic Unit 02030104, on north side of Ernston Road about 600 ft (183 m) east of the Garden State Parkway, Sayreville.
Owner: Sayreville Water Department.

AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 248 ft (75.6 m), screened 238 to 248 ft (72.5 to 75.6 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 23.35 ft (7.117 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.0 ft (0.91 m) above land-surface datum.

REMARKS.--Water levels in this well are affected by pumpage.

PERIOD OF RECORD.--November 1973 to July 1975, March 1977 to April 1980 (discontinued). Records for 1973 to 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.11 ft (20.455 m) below land-surface datum, Mar. 29, 1974; lowest water level, 110.08 ft (33.552 m) below land-surface datum, July 21, 1979.

EXTREMES FOR CURRENT YEAR.--Highest water level, 82.29 ft (25.082 m) below land-surface datum, Mar. 4; lowest water Level, 102.04 ft (31.102 m) below land-surface datum, Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	101.10	98.03	---	95.19	95.78	91.61	95.14					
10	101.20	---	---	95.63	95.43	95.07	94.73					
15	100.25	---	95.53	95.45	95.64	95.26	---					
20	101.19	---	95.92	97.02	95.26	95.66	---					
25	99.80	---	95.85	96.24	95.04	95.08	---					
EOM	99.09	---	95.50	95.97	95.22	95.17	---					
MEAN	100.38	---	95.75	95.85	95.43	94.49	---					

MONMOUTH COUNTY

402626074114204. Local I.D., Keyport Boro WD 4. Unique Well Number, 25-0206.

LOCATION.--Lat 40°26'26", long 74°11'42", Hydrologic Unit 02030104, at the unused Myrtle Avenue Water Plant, Keyport.
Owner: Keyport Borough Water Department.

AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 289 ft (88.1 m), screened 229 to 289 ft (69.8 to 88.1 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 14.50 ft (4.420 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.3 ft (0.70 m) above land-surface datum.

REMARKS.--Water levels in this well are affected by tidal fluctuation.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.32 ft (7.108 m) below land-surface datum, Apr. 14, 1980; lowest water level, 34.88 ft (10.631 m) below land-surface datum, July 22, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 23.32 ft (7.108 m) below land-surface datum, Apr. 14; lowest water level, 34.88 ft (10.631 m) below land-surface datum, July 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.19	28.08	27.27	26.81	27.30	26.37	25.66	25.88	27.69	31.34	31.68	33.12
10	28.87	27.55	27.78	27.24	26.67	26.88	25.18	26.98	27.31	31.22	32.21	33.53
15	28.79	27.76	26.93	26.48	27.14	27.10	25.17	26.91	27.80	32.69	32.38	33.24
20	28.40	28.23	26.56	27.70	27.01	26.19	26.31	26.50	28.89	33.54	31.85	32.85
25	28.79	27.59	26.32	27.86	26.25	25.43	26.17	26.41	30.94	33.52	31.84	32.36
EOM	28.97	27.48	27.39	27.52	26.56	25.73	25.68	27.49	31.43	32.61	32.96	31.83
MEAN	28.62	27.84	27.17	27.40	26.90	26.36	25.74	26.60	28.77	32.50	32.12	32.93

WTR YR 1980 MEAN 28.59 HIGH 25.08 APR 14 LOW 34.01 JUL 23

MONMOUTH COUNTY

400832074082101. Local I.D., Allaire State Park C Obs. Unique Well Number, 25-0429.

LOCATION.--Lat 40°08'34", long 74°08'34", Hydrologic Unit 02040301, approximately 1.3 mi (2.1 km) southeast of Lower Squankum, in Allaire State Park, Wall Township.

Owner: U.S. Geological Survey.

AQUIFER.--Englishtown Sand of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 715 ft (217.9 m), screened 623 to 633 ft (189.9 tO 192.9 m).

INSTRUMENTATION.--Water-level extremes recorder. January 1964 to July 1975, water-level recorder.

DATUM.--Land-surface datum is 97.93 ft (29.849 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing 1.64 ft (0.500 m) above land-surface datum.

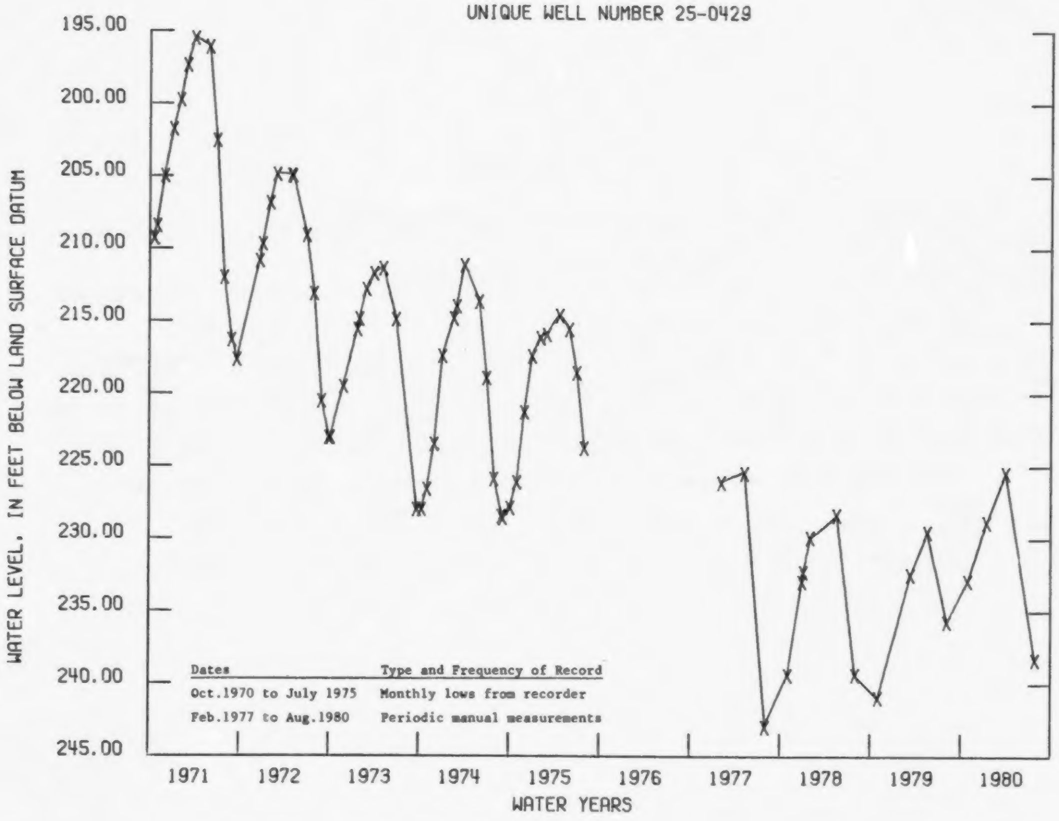
PERIOD OF RECORD.--January 1964 to July 1975, February 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 141.05 ft (42.992 m) below land-surface datum, Apr. 8, 1964; lowest water level, 245.60 ft (74.859 m) below land-surface datum, between Aug. 1 and Oct. 22, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 225.73 ft (68.803 m) below land-surface datum, between Jan. 16 and Apr. 3; lowest water level, 245.60 ft (74.859 m) below land-surface datum, between Aug. 1 and Oct. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	233.18	JAN 16	229.14	APR 3	225.76	AUG 1	238.61



MONMOUTH COUNTY

401518074223001. Local I.D., Manalapan 1 Obs. Unique Well Number, 25-0216.

LOCATION.--Lat 40°15'18", long 74°22'30", Hydrologic Unit 02030105, on the north side of Route 33 about 0.3 mi (0.5 km) west of Woodward Road, Manalapan Township.

Owner: Manalapan Township Water Department.

AQUIFER.--Englishtown Sand of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 185 ft (56.4 m), screened 125 to 185 ft (38.1 to 56.4 m).

INSTRUMENTATION.--Water-level extremes recorder. April 1971 to July 1975, water-level recorder.

DATUM.--Land-surface datum is 122.11 ft (37.219 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.28 ft (0.695 m) above land-surface datum.

PERIOD OF RECORD.--April 1971 to July 1975, January 1977 to current year. Records for 1971 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.00 ft (0.000 m) below land-surface datum, May 19-20, 1973; lowest water level, 3.65 ft (1.113 m) below land-surface datum, between Aug. 25 and Oct. 7, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 0.99 ft (0.302 m) below land-surface datum, between Mar. 10 and May 28; lowest water level, 3.65 ft (1.113 m) below land-surface datum, between Aug. 25 and Oct. 7, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	1.86	MAR 10	2.02	MAY 28	1.22	AUG 25	3.03

MONMOUTH COUNTY

402536073590501. Local I.D., Sandy Hook SP Obs. 1. Unique Well Number, 25-0316.

LOCATION.--Lat 40°25'36", long 73°59'05", Hydrologic Unit 02030104, about 1.9 mi (3.1 km) north of the main entrance of Sandy Hook Park, Middletown Township.

Owner: National Park Service (formerly State of New Jersey).

AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 397 ft (121.0 m), screened 371 to 397 ft (113.1 to 121.0 m).

INSTRUMENTATION.--Water-level extremes recorder. May 1965 to August 1975, water-level recorder.

DATUM.--Land-surface datum is 10.91 ft (3.325 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 1.20 ft (0.366 m) above land-surface datum.

PERIOD OF RECORD.--May 1965 to August 1975, February 1977 to May 1978, November 1978 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.99 ft (2.740 m) below land-surface datum, Jan. 23, 1966; lowest water level, 20.12 ft (6.133 m) below land-surface datum, between Sept. 7 and Nov. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 13.83 ft (4.215 m) below land-surface datum, between Apr. 3 and June 23; lowest water level, 19.18 ft (5.846 m) below land-surface datum, between Aug. 25 and Oct. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	16.64	JAN 15	16.23	APR 3	15.71	JUN 23	16.38	AUG 25	18.21

MONMOUTH COUNTY

401906074151401. Local I.D., Village 215 Obs. Unique Well Number, 25-0250.

LOCATION.--Lat 40°19'18", long 74°15'29", Hydrologic Unit 02030105, near intersection of River Drive and Newport Road, about 0.6 mi (1.0 km) northwest of Route 79 in Marlboro.

Owner: Gordons Corner Water Company.

AQUIFER.--Englishtown Sand of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 215 ft (65.5 m), screened 186 to 215 ft (56.7 to 65.5 m).

INSTRUMENTATION.--Water-level extremes recorder. April 1971 to July 1975, water-level recorder.

DATUM.--Land-surface datum is 138.62 ft (42.251 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 2.58 ft (0.786 m) above land-surface datum.

PERIOD OF RECORD.--April 1971 to July 1975, January 1977 to current year. Records for 1971 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.30 ft (10.759 m) below land-surface datum, Jan. 9-10, 1972; lowest water level, 39.09 ft (11.915 m) below land-surface datum, between Aug. 3 and Nov. 3, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 36.48 ft (11.119 m) below land-surface datum, between Mar. 10 and May 28; lowest water level, 38.63 ft (11.774 m) below land-surface datum, between Aug. 25 and Oct. 7, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	37.23	MAR 10	37.67	MAY 28	36.71	AUG 25	38.12

MONMOUTH COUNTY

402208074145201. Local I.D., Marlboro Obs 1. Unique Well Number, 25-0272.

LOCATION.--Lat 40°22'08", long 74°14'52" (revised), Hydrologic Unit 02030104, on the west side of New Jersey Route 79, 0.9 mi (1.45 km) south of Morganville.

Owner: Marlboro Township Municipal Utilities Authority.

AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 680 ft (207 m), screened 670 to 680 ft (204 to 207 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 116.93 ft (35.640 m) National Geodetic Vertical Datum of 1929.

Measuring point: Top edge of recorder shelf, 2.5 ft (0.76 m) above land-surface datum.

REMARKS.--Water levels in this well are occasionally affected by pumpage.

PERIOD OF RECORD.--January 1973 to July 1975, March 1977 to current year. Records for 1973 to 1977 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 144.06 ft (43.910 m) below land-surface datum, Apr. 4, 1973; lowest water level, 184.57 ft (56.257 m) below land-surface datum, Sept. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 157.23 ft (47.924 m) below land-surface datum, Jan. 5; lowest water level, 184.57 ft (56.257 m) below land-surface datum, Sept. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	163.29	160.76	158.57	157.47	157.82	158.29	159.87	---	167.97	---	179.11	183.55
10	162.59	160.76	158.35	157.95	157.72	158.40	160.41	---	168.65	---	180.44	183.75
15	162.24	160.15	158.34	157.91	157.92	159.03	160.28	---	171.43	178.45	179.83	183.72
20	161.71	159.39	158.52	157.71	157.88	159.51	161.03	---	172.73	180.18	178.96	181.94
25	161.57	159.05	158.06	157.57	158.06	159.57	162.58	---	175.50	180.20	180.20	181.64
EOM	161.06	158.91	157.85	157.75	158.31	159.75	162.00	---	---	179.30	182.08	179.37
MEAN	162.25	159.96	158.34	157.75	157.91	159.03	160.91	---	171.14	179.62	179.78	182.59

WTR YR 1980 MEAN 165.69 HIGH 157.44 JAN 23 LOW 184.45 SEP 14

MORRIS COUNTY

404639074230001. Local I.D., Briarwood School Obs. Unique Well Number, 27-0012.

LOCATION.--Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at the Briarwood School near Florham Park. Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 6 in (152 mm), depth 110 ft (33.5 m), screened 100 to 110 ft (30.5 to 33.5 m).

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 198.00 ft (60.350 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of recorder shelf, 3.0 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--March 1967 to May 1975, April 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.

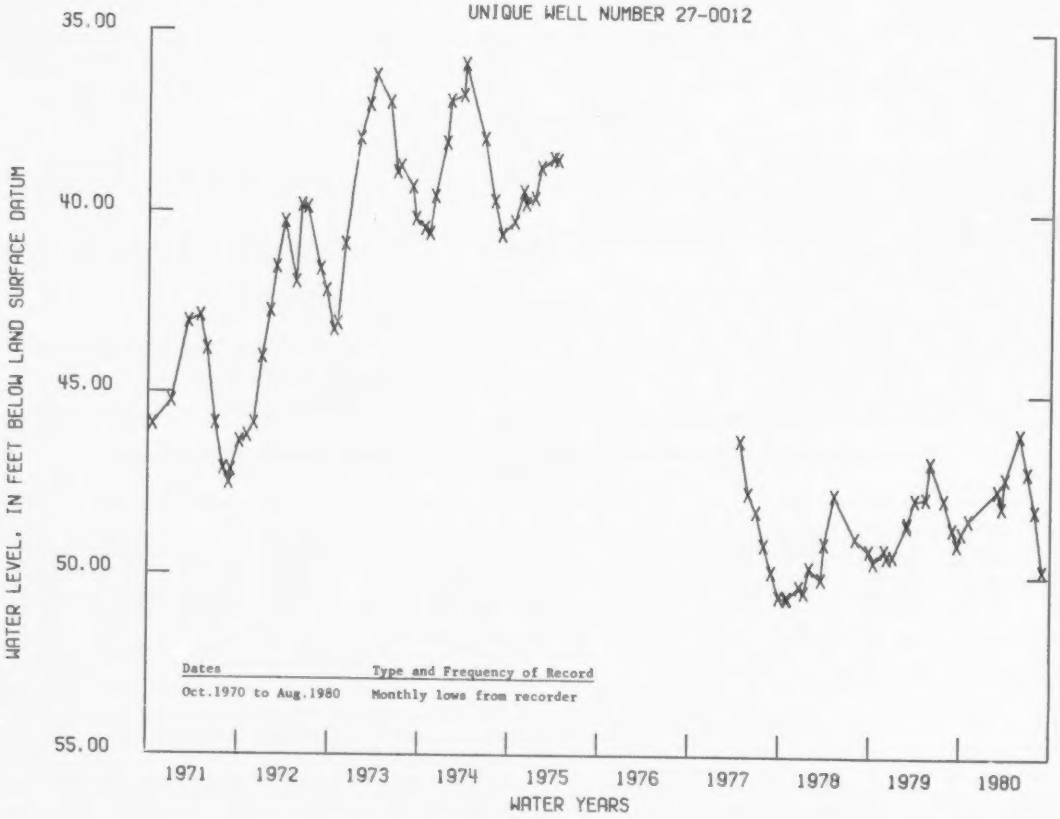
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft (10.415 m) below land-surface datum, June 3, 1968; lowest water level, 50.63 ft (15.432 m) below land-surface datum, Oct. 4, 31, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 45.37 ft (13.829 m) below land-surface datum, May 13-14; lowest water level, 49.92 ft (15.216 m) below land-surface datum, Sept. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.51	48.35	47.48	---	---	47.38	46.75	45.75	46.25	47.04	48.45	---
10	48.62	48.18	47.49	---	---	47.70	46.41	---	46.42	47.17	48.69	---
15	---	48.05	---	---	47.08	47.98	45.93	45.67	46.38	47.39	48.88	---
20	48.35	47.92	---	---	47.09	47.80	46.02	45.54	46.62	47.65	49.23	---
25	48.39	47.88	---	---	47.21	47.63	45.97	45.63	46.82	47.84	49.51	---
EOM	48.37	47.86	---	---	47.48	47.21	---	46.00	46.99	48.11	49.77	---
MEAN	48.46	48.04	---	---	47.21	47.63	46.38	45.68	46.53	47.50	49.00	---

WTR YR 1980 MEAN 47.46 HIGH 45.42 MAY 13 LOW 49.85 SEP 1



OCEAN COUNTY

395714074223401. Local I.D., Crammer Obs. Unique Well Number, 29-0486.
LOCATION.--Lat 39°57'14", long 74°22'34", Hydrologic Unit 02040301, about 800 ft (244 m) east of Central Railroad of New Jersey, Whiting.
Owner: Mr. Frank Reynolds (formerly Mrs. William Crammer).
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Water-table observation well, diameter 8 in (203 mm), depth 69 ft (21.0 m), slotted steel casing gravel packed.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 179.00 ft (54.559 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8-inch coupling, 0.9 ft (0.27 m) above land-surface datum.
REMARKS.--Originally a dug well in which casing was inserted on March 31, 1966.
PERIOD OF RECORD.--1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.80 ft (14.569 m) below land-surface datum, June 9-14, 20-29, 1973; lowest water level, well dry, November 1957 to February 1958, December 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 50.81 ft (15.487 m) below land-surface datum, Oct. 1; lowest water level, 53.77 ft (16.389 m) below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.87	51.22	51.55	51.99	52.40	52.71	52.85	51.52	51.42	51.90	52.54	53.18
10	50.93	51.23	51.63	52.09	52.45	52.76	52.76	51.42	51.47	51.97	52.63	53.30
15	51.00	51.28	51.70	52.13	52.51	52.82	52.58	51.35	51.53	52.08	52.73	53.43
20	51.05	51.36	51.77	52.21	52.56	52.89	52.35	51.31	51.61	52.19	52.84	53.55
25	51.08	51.44	51.82	52.25	52.61	52.91	52.02	51.29	51.70	52.30	52.95	53.66
EOM	51.15	51.50	51.92	52.34	52.65	52.91	51.74	51.36	51.78	52.44	53.07	53.76
MEAN	51.00	51.31	51.71	52.15	52.50	52.82	52.47	51.40	51.56	52.11	52.76	53.43

WTR YR 1980 MEAN 52.10 HIGH 50.82 OCT 1 LOW 53.76 SEP 30

OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills TW 1 Obs. Unique Well Number, 29-0138.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 427 ft (130.2 m), screened 417 to 427 ft (127.1 to 130.2 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 136.52 ft (41.611 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--February 1964 to July 1975, March 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.02 ft (15.856 m) below land-surface datum, Feb. 19, 1964; lowest water level, 73.06 ft (22.269 m) below land-surface datum, Sept. 29, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 71.12 ft (21.677 m) below land-surface datum, Apr. 4; lowest water level, 73.06 ft (21.269 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.36	71.54	71.43	71.38	71.49	71.47	71.21	71.22	71.49	71.73	72.35	72.81
10	---	71.42	71.50	71.56	71.42	71.48	71.18	71.33	71.46	71.83	72.39	72.84
15	---	71.42	71.53	71.41	71.49	71.49	71.18	71.35	71.51	71.97	72.42	72.81
20	---	71.49	71.52	71.40	71.48	71.50	71.32	71.33	71.58	72.09	72.52	72.93
25	71.42	71.55	71.30	71.29	71.46	71.30	71.29	71.28	71.71	72.21	72.64	72.99
EOM	71.58	71.46	71.42	71.43	71.51	71.26	71.21	71.45	71.63	72.23	72.72	73.04
MEAN	71.44	71.47	71.46	71.42	71.47	71.45	71.28	71.32	71.57	71.98	72.48	72.89

WTR YR 1980 MEAN 71.70 HIGH 71.18 APR 4 AND OTHERS LOW 73.06 SEP 29

OCEAN COUNTY

400416074270103. Local I.D., Colliers Mills TW 3 Obs. Unique Well Number, 29-0140.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills pond, Jackson Township.

Owner: U.S. Geological Survey.

AQUIFER.--Mount Laurel Sand-Wenonah Formation undifferentiated of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 270 ft (82.3 m), screened 257 to 267 ft (78.3 to 81.4 m).

INSTRUMENTATION.--Water-level extremes recorder. January 1964 to July 1975, water-level recorder.

DATUM.--Land-surface datum is 135.15 ft (41.194 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing, 3.49 ft (1.064 m) above land-surface datum.

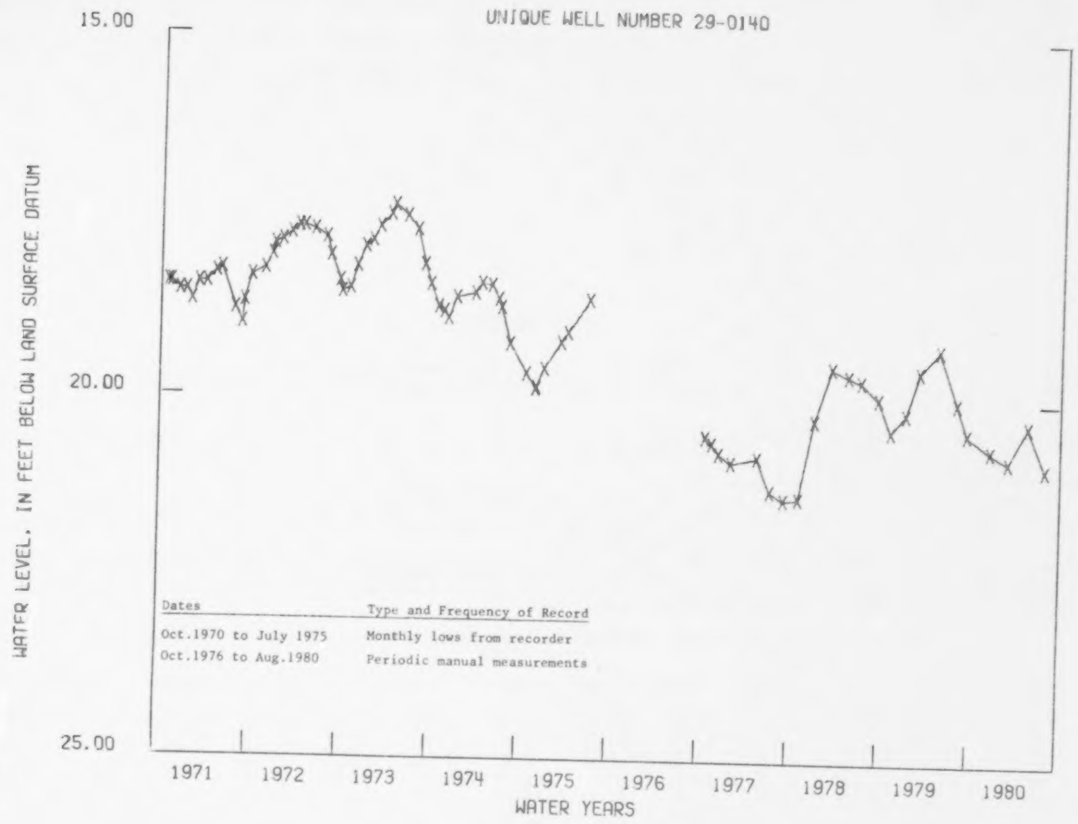
PERIOD OF RECORD.--January 1964 to July 1975, October 1976 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft (4.791 m) below land-surface datum, May 9, 1964; lowest water level, 21.61 ft (6.587 m) below land-surface datum, between Aug. 1 and Oct. 3, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 20.25 ft (6.172 m) below land-surface datum, between May 22 and Aug. 1; lowest water level, 21.61 ft (6.587 m) below land-surface datum, between Aug. 1 and Oct. 3, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	20.66	MAR 4	20.80	MAY 22	20.30	AUG 1	20.90



OCEAN COUNTY

394829074053501. Local I.D., Island Beach 1 Obs. Unique Well Number, 29-0017.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park about 6.6 mi (10.6 km) south of main entrance, Berkley Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 397 ft (121.0 m), screened 377 to 397 ft (114.9 to 121.0 m).
INSTRUMENTATION.--Water-level extremes recorder. July 1962 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 8.50 ft (2.591 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.40 ft (1.036 m) above land-surface datum.
PERIOD OF RECORD.--July 1962 to March 1975, February 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.05 ft (0.015 m) below land-surface datum, Dec. 6, 1962; lowest water level, 6.14 ft (1.871 m) below land-surface datum, between Dec. 13, 1978 and Jan. 10, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 2.22 ft (0.677 m) below land-surface datum, between Apr. 18 and July 2; lowest water level, 5.52 ft (1.682 m) below land-surface datum, between Oct. 31 and Jan. 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	4.97	JAN 7	3.43	APR 18	3.42	JUL 2	3.19

OCEAN COUNTY

394829074053503. Local I.D., Island Beach 3 Obs. Unique Well Number, 29-0019.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park about 6.6 mi (10.6 km) south of main entrance, Berkley Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 2,756 ft (840.0 m), screened 2,736 to 2,756 ft (833.9 to 840.0 m).
INSTRUMENTATION.--Water-level extremes recorder. November 1968 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 9.02 ft (2.749 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 5.11 ft (1.558 m) above land-surface datum.
PERIOD OF RECORD.--November 1968 to March 1975, February 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.95 ft (1.814 m) above land-surface datum, Apr. 23, 1969; lowest water level, 12.25 ft (3.734 m) below land-surface datum, between July 2 and Oct. 3, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 8.68 ft (2.646 m) below land-surface datum, between Aug. 6 and Oct. 31, 1979; lowest water level, 12.25 ft (3.734 m) below land-surface datum, between July 2 and Oct. 3, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	10.96	JAN 7	9.83	APR 18	10.10	JUL 2	10.09

OCEAN COUNTY

395930074142101. Local I.D., Toms River Chem 84 Obs. Unique Well Number, 29-0085.
LOCATION.--Lat 39°59'29", long 74°14'20", Hydrologic Unit 02040301, on the lands of Toms River Chemical Company, Dover Township.
Owner: Toms River Chemical Company.
AQUIFER.--Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 1,480 ft (451 m), screened 1,460 to 1,480 ft (445 to 451 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 66.70 ft (20.330 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.7 ft (0.82 m) above land-surface datum.
PERIOD OF RECORD.--July 1968 to July 1975, March 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft (18.995 m) below land-surface datum, July 19, 1968 and February 9, 1969; lowest water level, 92.37 ft (28.154 m) below land-surface datum, Sept. 29, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 90.06 ft (27.450 m) below land-surface datum, Oct. 5; lowest water level, 92.37 ft (28.154 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.21	90.79	90.75	90.71	90.89	90.74	90.26	90.17	90.50	90.64		---
10	90.29	90.59	90.90	91.06	90.74	90.73	90.19	90.36	90.41	90.73		---
15	90.42	90.67	90.99	90.78	90.85	90.75	90.11	90.40	90.45	90.90		---
20	90.52	90.80	90.98	90.79	90.78	90.73	90.37	90.36	90.55	91.00		92.13
25	90.43	90.85	90.54	90.60	90.74	90.43	90.30	90.21	90.71	---		92.20
EOM	90.77	90.75	90.76	90.78	90.85	90.38	90.19	90.48	90.54	---		92.30
MEAN	90.39	90.70	90.82	90.80	90.81	90.67	90.33	90.33	90.55	90.81		92.15

WTR YR 1980 MEAN 90.69 HIGH 90.11 APR 15 LOW 92.35 SEP 29

OCEAN COUNTY

395609074124001. Local I.D., Toms River TW 2 Obs. Unique Well Number, 29-0534.
LOCATION.--Lat 39°56'09", long 74°12'40", Hydrologic Unit 02040301, about 200 ft (61.0 m) east of Double Trouble Road on the north side of Jakes Branch, South Toms River.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 1,146 ft (349.3 m), screened 1,080 to 1,146 ft (329.2 to 349.3 m).
INSTRUMENTATION.--Water-level extremes recorder. December 1965 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 18.34 ft (5.590 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 1.70 ft (0.518 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to March 1975, February 1977 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.37 ft (14.743 m) below land-surface datum, May 28, 1966; lowest water level, 100.62 ft (30.669 m) below land-surface datum, between July 2 and Oct. 3, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level, 97.34 ft (29.669 m) below land-surface datum, between Aug. 6 and Oct. 31, 1979; lowest water level, 100.62 ft (30.669 m) below land-surface datum between July 2 and Oct. 3, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	99.77	JAN 7	99.82	APR 18	99.37	JUL 2	99.08

PASSAIC COUNTY

410209074170801. Local I.D., Haskell Obs. Unique Well Number, 31-0011.
LOCATION.--Lat 41°02'09", long 74°17'08", Hydrologic Unit 02030103, at well field at north end of 4th Avenue, Wanaque.
Owner: Wanaque Water Department.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 16 ft (4.9 m), depth 26 ft (7.9 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 260.50 ft (79.400 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of concrete pump base, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--May 1965 to August 1970, April 1977 to current year. Records for 1965 to 1970 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.64 ft (0.500 m) below land-surface datum, Apr. 10, 1980; lowest water level, 16.01 ft (4.880 m) below land-surface datum, Aug. 30, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 1.64 ft (0.500 m) below land-surface datum, Apr. 10; lowest water level, 14.66 ft (4.468 m) below land-surface datum, Sept. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.38	11.92	7.64	8.25	7.90	8.80	4.75	8.23	11.90	8.24	8.15	14.03
10	7.32	12.23	7.95	8.56	8.29	8.83	1.97	10.26	8.57	7.93	10.92	14.30
15	7.33	12.47	7.93	7.94	8.53	8.47	4.37	8.71	8.03	11.13	9.02	11.97
20	7.25	8.31	8.14	7.86	8.61	7.48	5.68	7.60	10.92	11.71	8.57	8.98
25	9.24	7.87	8.14	7.53	8.57	3.79	8.12	8.17	12.58	11.13	10.04	8.53
EOM	11.96	7.38	8.05	7.80	8.68	4.67	4.34	10.73	11.35	9.04	13.25	8.42
MEAN	8.35	10.35	7.92	7.99	8.37	7.21	5.43	8.64	10.60	10.10	9.72	11.40

WTR YR 1980 MEAN 8.84 HIGH 1.97 APR 10 LOW 14.56 SEP 12

UNION COUNTY

404027074164401. Local I.D., White Lab. 3 Obs. Unique Well Number, 39-0102.
LOCATION.--Lat 40°40'27", long 74°16'44", Hydrologic Unit 02030104, at north end of South 31st Street, Kenilworth.
Owner: Schering Corporation.
AQUIFER.--Brunswick Shale of Triassic age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), cased to approximately 40 ft (12.2 m), depth 251 ft (76.5 m), open hole.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 85.22 ft (25.975 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf at land-surface datum.
REMARKS.--Land-surface datum prior to February 1974, 4.2 ft (1.28 m) lower.
PERIOD OF RECORD.--September 1952 to current year. Records for March to August 1952, published in WSP 1265, are unreliable and should not be used.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.51 ft (3.203 m) below land-surface datum, Apr. 17, 1961; lowest water level, 30.70 ft (9.357 m) below land-surface datum, Oct. 7, 1977, revised.
EXTREMES FOR CURRENT YEAR.--Highest water level, 20.57 ft (6.270 m) below land-surface datum, May 19; lowest water level, 27.95 ft (8.519 m) below land-surface datum, Mar. 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.57	23.91	25.50	24.90	26.18	26.65	23.97	21.73	24.38	23.36	23.47	25.22
10	22.98	23.86	25.02	24.16	---	27.54	23.32	21.38	22.01	23.64	23.50	25.40
15	23.24	25.36	---	25.78	26.31	27.02	22.11	22.01	21.96	23.70	24.13	25.19
20	23.11	25.26	22.56	25.27	25.87	27.16	22.21	21.47	24.37	22.81	24.66	25.75
25	22.24	24.89	22.34	25.33	27.19	26.12	23.27	21.69	23.68	23.07	23.27	25.38
EOM	24.07	25.19	24.90	25.19	26.61	24.80	23.14	22.46	22.40	22.98	23.40	24.67
MEAN	22.91	24.62	24.09	25.12	26.33	26.66	23.37	22.01	23.11	23.19	23.77	25.16

WTR YR 1980 MEAN 24.16 HIGH 20.75 MAY 19 LOW 27.88 MAR 12

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ATLANTIC COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
367	LONGPORT BORO WD 2	39 18 59	074 31 22	01	122KRKDL	80-09-03	20.0	163	7.5	7.1
582	NJWC-ATL CO-DOBBS AVE	39 19 05	074 36 31	01	121CNSY	80-08-28	15.0	124	4.8	19
590	NJWC-ATL CO-GROVELAND	39 19 24	074 35 49	01	121CNSY	80-08-28	14.0	285	4.5	77
372	MARGATE CITY WD 7	39 19 33	074 30 58	01	122KRKDL	80-09-03	20.0	142	7.4	4.2
375	MARGATE CITY WD 4	39 20 03	074 30 11	01	122KRKDL	80-09-03	19.5	152	7.3	6.5
596	VENTNOR CITY WD 4	39 20 30	074 28 54	01	122KRKDL	80-09-03	20.0	162	7.3	6.5
648	BALLLY PARK PLACE 1-79	39 21 25	074 26 04	01	122KRKDL	80-06-06	--	166	--	4.7
-	RESORTS INTER. 1-80	39 21 37	074 25 24	01	122KRKDL	80-09-03	20.0	172	7.4	7.1
549	NJWC-ATL CO-MILL ROAD	39 21 58	074 33 17	01	121CNSY	80-08-28	14.0	121	4.9	14
39	BRIGANTINE CITY WD 4-66	39 23 24	074 23 14	01	122KRKDL	80-08-28	19.0	266	7.0	36
558	NJWC-ATL CO-WOODLAND AVE	39 23 33	074 31 44	01	121CNSY	80-08-28	14.0	66	5.0	9.2
41	BRIGANTINE CITY WD 1-25	39 24 31	074 21 53	01	122KRKDL	80-08-28	19.0	127	7.1	4.3
5	ATLANTIC CITY WD 2	39 24 36	074 30 33	01	121CNSY	80-08-28	13.5	114	4.8	14
569	ATLANTIC CITY WD 13	39 24 41	074 30 49	01	121CNSY	80-08-28	13.0	87	4.8	11
572	ATLANTIC CITY WD 4A-68	39 24 46	074 30 32	01	121CNSY	80-08-28	13.5	302	4.7	68
568	ATLANTIC CITY WD 15-61	39 24 48	074 30 28	01	122KRKDL	80-08-28	18.0	111	6.9	2.5
575	ATLANTIC CITY WD 12	39 25 48	074 31 08	01	121CNSY	80-08-28	14.0	51	5.5	4.9
13	NJWC-ATL CO-ABSECON 1	39 25 51	074 30 23	01	121CNSY	80-08-28	13.0	51	4.8	6.6

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
LONGPORT BORO WD 2	80-09-03	10.00	818	800	739	808	750	800	15	475
NJWC-ATL CO-DOBBS AVE	80-08-28	20.00	--	99	--	--	79	99	1440	650
NJWC-ATL CO-GROVELAND	80-08-28	19.00	188	159	127	159	129	159	240	1000
MARGATE CITY WD 7	80-09-03	5.00	--	800	--	--	760	800	300	780
MARGATE CITY WD 4	80-09-03	10.00	--	795	--	--	745	795	1440	760
VENTNOR CITY WD 4	80-09-03	8.00	--	810	--	--	760	810	240	650
BALLLY PARK PLACE 1-79	80-06-06	7.00	--	835	--	--	--	--	--	--
RESORTS INTER. 1-80	80-09-03	10.00	--	840	--	--	--	--	--	--
NJWC-ATL CO-MILL ROAD	80-08-28	20.00	--	152	--	--	117	152	120	1000
BRIGANTINE CITY WD 4-66	80-08-28	10.00	788	783	737	788	733	783	210	1000
NJWC-ATL CO-WOODLAND AVE	80-08-28	50.00	--	157	--	--	--	--	300	950
BRIGANTINE CITY WD 1-25	80-08-28	9.00	--	829	--	--	769	829	720	650
ATLANTIC CITY WD 2	80-08-28	11.00	--	116	--	--	67	97	900	1300
ATLANTIC CITY WD 13	80-08-28	8.00	--	90	--	--	60	90	--	--
ATLANTIC CITY WD 4A-68	80-08-28	8.00	118	105	70	115	75	105	360	1200
ATLANTIC CITY WD 15-61	80-08-28	8.00	--	636	--	--	583	633	400	1000
ATLANTIC CITY WD 12	80-08-28	5.00	--	195	--	--	145	195	180	1000
NJWC-ATL CO-ABSECON 1	80-08-28	30.00	263	205	160	204	177	205	1440	1000

Geologic unit (aquifer):
121CNSY - Cohansey Sand
122KRKDL - Kirkwood Formation, Lower Sand

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

CAPE MAY COUNTY

WELL NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TEMPERATURE, WATER (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	CHLORIDE, DISSOLVED (MG/L AS CL)
17	US COAST GUARD 1	38 56 50	074 53 11	01	121CNSY	80-08-27	15.5	362	7.6	38
18	US COAST GUARD 2	38 56 52	074 53 27	01	121CNSY	80-08-27	15.5	323	7.7	28
154	WILDWOOD WD PINE 2	38 59 32	074 48 51	02	121CNSY	80-08-22	15.0	646	7.4	120
132	STONE HARBOR WD 4	39 03 01	074 45 45	01	122KRKDL	80-08-22	20.0	332	8.6	31
2	AVALON BORO WD 7-71	39 04 20	074 44 35	02	122KRKDL	80-08-26	20.5	244	8.4	13
4	AVALON BORO WD 6-68	39 05 28	074 43 38	01	122KRKDL	80-08-26	20.5	361	8.5	44
5	AVALON BORO WD 8-76	39 05 45	074 43 26	01	122KRKDL	80-08-26	20.0	239	8.4	11
8	AVALON BORO WD 3-30	39 06 21	074 42 48	01	122KRKDL	80-08-26	19.5	323	8.4	37
126	SEA ISLE CITY WD 5	39 07 47	074 42 41	01	122KRKDL	80-08-26	19.5	235	8.2	11
129	SEA ISLE CITY WD 2	39 09 26	074 41 31	01	122KRKDL	80-08-26	19.0	232	8.1	12
106	NJWC-OCEAN CITY DIST 7	39 13 43	074 37 55	01	122KRKDL	80-08-26	20.0	203	7.6	10
125	NJWC-OCEAN CITY DIST 11	39 17 26	074 33 52	01	122KRKDL	80-08-26	19.0	170	7.5	6.2

LOCAL IDENTIFIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)
US COAST GUARD 1	80-08-27	11.00	332	332	279	324	292	322	10	260
US COAST GUARD 2	80-08-27	11.00	--	325	--	--	295	325	10	260
WILDWOOD WD PINE 2	80-08-22	10.00	364	364	--	--	304	354	200	300
STONE HARBOR WD 4	80-08-22	10.00	965	880	820	952	830	880	180	650
AVALON BORO WD 7-71	80-08-26	10.00	905	861	807	870	821	861	1200	650
AVALON BORO WD 6-68	80-08-26	10.00	950	922	870	--	880	920	1200	650
AVALON BORO WD 8-76	80-08-26	8.00	982	839	777	840	784	839	1200	650
AVALON BORO WD 3-30	80-08-26	10.00	--	925	--	--	845	925	10	250
SEA ISLE CITY WD 5	80-08-26	7.00	1000	802	739	--	731	802	180	500
SEA ISLE CITY WD 2	80-08-26	7.00	864	864	--	--	744	861	10	500
NJWC-OCEAN CITY DIST 7	80-08-26	8.00	810	810	--	--	760	810	1200	850
NJWC-OCEAN CITY DIST 11	80-08-26	10.00	--	797	--	--	747	797	1200	600

Geologic unit (aquifer):
121CNSY - Cohansey Sand
122KRKDL - Kirkwood Formation, Lower Sand

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MIDDLESEX COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	ELEV. OF LAND SURFACE DATUM (FT. NGVD)
205	OLD BRIDGE TWP MUA-LH 1	40 27 00	074 14 59	01	211ODBG	79-10-24	12.5	64	4.0	60.00
					211ODBG	80-09-19	12.5	54	4.3	60.00
206	OLD BRIDGE TWP MUA-LH 2	40 27 00	074 14 59	02	211FRNG	80-09-19	13.5	59	1.9	60.00
415	NL INDUSTRIES 4	40 28 31	074 18 15	01	211FRNG	79-10-24	12.0	80	2.8	109.00
418	NL INDUSTRIES 3	40 28 42	074 18 11	01	211FRNG	79-10-24	12.0	710	55	120.00
255	CARBORUNDUM CO 1	40 30 46	074 18 27	01	211FRNG	79-10-25	13.0	286	11	15.00
263	CHEVRON OIL CO 2	40 32 00	074 16 20	01	211FRNG	79-10-25	13.0	325	8.3	45.00
473	HAAGEN DAZS INC.	40 32 33	074 16 33	01	211FRNG	79-10-25	12.5	1060	220	30.00
478	AMER CYANAMID CO 2A	40 32 36	074 16 16	01	211FRNG	79-10-25	14.0	1160	200	9.00

LOCAL IDENT-I-FIER	DATE OF SAMPLE	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
OLD BRIDGE TWP MUA-LH 1	79-10-24	--	218	185	--	193	213	30	300
	80-09-19	--	218	185	--	193	213	180	300
OLD BRIDGE TWP MUA-LH 2	80-09-19	400	400	355	397	360	395	5	730
NL INDUSTRIES 4	79-10-24	--	251	--	--	220	251	15	600
NL INDUSTRIES 3	79-10-24	--	270	--	--	240	270	15	600
CARBORUNDUM CO 1	79-10-25	76	71	36	69	57	67	--	--
CHEVRON OIL CO 2	79-10-25	--	106	--	--	96	106	--	--
HAAGEN DAZS INC.	79-10-25	59	59	--	--	--	39	--	--
AMER CYANAMID CO 2A	79-10-25	--	60	--	--	45	60	1440	80

Geologic unit (aquifer):
211ODBG - Magothy Formation, Old Bridge Sand Member
211FRNG - Raritan Formation, Farrington Sand Member

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONMOUTH COUNTY

WELL NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TEMPER- ATURE, WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
30	BRIELLE BORO WD 2	40 06 45	074 03 45	01	211EGLS	80-08-14	20.0	186	8.0	1.1
233	MANASQUAN BORO WD 6	40 07 10	074 03 29	02	122KRKD	80-08-14	13.0	63	4.9	9.4
234	MANASQUAN BORO WD 3	40 07 12	074 03 28	01	122KRKD	80-08-14	13.0	94	4.6	14
235	MANASQUAN BORO WD 2R	40 07 12	074 03 28	02	122KRKD	80-08-14	13.0	85	4.8	13
237	MANASQUAN BORO WD 5	40 07 14	074 03 29	01	122KRKD	80-08-14	13.0	69	5.0	10
464	SEA GIRT BORO WD 6	40 08 01	074 02 31	01	122KRKD	80-08-14	13.5	76	5.8	9.9
374	SEA GIRT BORO WD 5	40 08 04	074 02 27	01	211EGLS	80-08-14	19.0	184	7.9	1.0
383	SPRING LAKE BORO WD 1	40 08 49	074 02 07	01	211EGLS	80-08-14	19.5	184	7.8	.9
387	SPRING LAKE HTS 1-53	40 08 58	074 03 09	01	211MLRW	80-08-19	17.5	198	8.1	.8
391	SPRING LAKE HTS 4-74	40 09 29	074 02 11	01	211MLRW	80-08-19	--	175	8.1	1.5
386	SPRING LAKE BORO WD 4	40 09 52	074 01 49	01	211EGLS	80-08-14	19.0	182	7.7	.8
-	BELMAR BORO WD 14-80	40 10 37	074 01 39	01	211EGLS	80-08-19	18.5	183	7.7	.8
26	BELMAR BORO WD 4-ELEC	40 11 02	074 00 45	01	211EGLS	80-08-19	19.5	187	7.7	.8
14	AVON-BY-THE-SEA WD 1	40 11 38	074 01 25	01	211MLRW	80-08-19	17.5	245	8.0	1.7
1	ALLENHURST BORO WD 4	40 14 01	074 00 25	01	211EGLS	80-08-19	18.0	216	7.5	1.4
358	RED BANK BORO WD 1B-50	40 20 47	074 04 20	01	211MGRR	80-08-20	17.0	104	6.4	1.5
190	KEANSBURG BORO WD 4	40 26 21	074 07 38	01	211ODBG	80-09-18	13.5	98	--	6.9
117	HIGHLANDS BORO WD 4-73	40 24 01	073 59 20	01	211MGRR	80-08-20	19.5	105	6.4	1.1
119	HIGHLANDS BORO WD 3-73	40 24 03	073 59 53	01	211MGRR	80-08-20	20.5	108	6.5	1.3
496	ATL HIGHLANDS WD 4-80	40 24 41	074 02 33	02	211ODBG	80-08-20	16.5	100	6.4	1.2
9	ATL HIGHLANDS BORO WD 2	40 24 41	074 02 34	01	211EGLS	80-08-20	13.5	183	6.8	5.6
284	MATAWAN BORO WD 3	40 25 15	074 14 50	01	211ODBG	80-09-18	12.5	77	--	3.2
195	KEANSBURG BORO WD 5A	40 26 21	074 07 43	01	211ODBG	80-09-18	14.0	74	--	1.9
111	W KEANSBURG WC-HAZLET 1	40 25 33	074 09 32	01	211ODBG	80-09-18	13.5	67	--	1.5
112	W KEANSBURG WC-HAZLET 2	40 25 37	074 09 33	01	211ODBG	80-09-18	13.5	70	--	1.4
197	KEYPORT BORO WD 7	40 25 35	074 12 14	01	211ODBG	80-09-18	13.5	61	--	1.6
199	KERR GLASS CO	40 25 42	074 12 20	01	211ODBG	80-09-18	13.5	70	--	1.6
297	ABERDEEN TWP WD 1-56	40 26 03	074 14 22	01	211FRNG	80-09-18	14.0	61	--	1.8
294	MATAWAN BORO WD 1	40 24 27	074 13 45	01	211ODBG	80-09-18	13.0	84	--	1.6
317	SEA COAST PRODUCTS 1	40 26 12	074 05 11	01	211ODBG	80-08-20	--	108	--	5.4
191	KEANSBURG BORO WD 6-68	40 26 20	074 07 42	01	211ODBG	80-09-18	13.5	139	--	18
196	KEANSBURG BORO WD 3	40 26 28	074 07 44	01	211ODBG	80-09-18	13.5	78	--	1.9
420	UNION BEACH BORO WD 2-69	40 26 34	074 10 52	01	211ODBG	79-10-24	13.0	--	--	950
424	INT FLAVOR FRAG 2	40 26 41	074 09 11	01	211ODBG	80-09-19	--	66	--	1.6
423	INT FLAVOR FRAG 1	40 26 41	074 09 19	01	211ODBG	80-09-19	13.5	65	--	1.6
320	NPS-SANDY HOOK 5A-70	40 27 05	073 59 59	02	211MGRR	80-08-20	19.0	121	6.7	5.3

Geologic unit (aquifer):
122KRKD - Kirkwood Formation
211MLRW - Mount Laurel Sand-Wenonah Formation
211EGLS - Englishtown Formation
211ODBG - Magothy Formation, Old Bridge Sand Member
211FRNG - Raritan Formation, Farrington Sand Member
211MGRR - Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONMOUTH COUNTY--Continued

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER- BEARING ZONE (FT)	DEPTH TO BOT- TOM OF WATER- BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (GPM)
BRIELLE BORO WD 2	80-08-14	33.00	792	755	680	751	690	750	15	375
MANASQUAN BORO WD 6	80-08-14	10.00	--	180	--	--	--	180	10	550
MANASQUAN BORO WD 3	80-08-14	15.00	--	118	--	--	--	--	10	500
MANASQUAN BORO WD 2R	80-08-14	21.00	122	118	102	118	103	118	15	500
MANASQUAN BORO WD 5	80-08-14	15.00	118	117	94	117	97	117	20	1000
SEA GIRT BORO WD 6	80-08-14	21.00	--	130	--	--	80	130	240	450
SEA GIRT BORO WD 5	80-08-14	20.00	--	710	660	--	660	710	10	400
SPRING LAKE BORO WD 1	80-08-14	15.00	750	711	623	707	631	711	360	450
SPRING LAKE HTS 1-53	80-08-19	60.00	--	600	--	--	--	--	180	150
SPRING LAKE HTS 4-74	80-08-19	20.00	--	561	--	--	485	560	15	150
SPRING LAKE BORO WD 4	80-08-14	10.00	675	675	--	--	600	670	300	500
BELMAR BORO WD 14-80	80-08-19	20.00	--	550	--	--	--	--	150	350
BELMAR BORO WD 4-ELEC	80-08-19	15.00	--	679	--	--	601	671	90	225
AVON-BY-THE-SEA WD 1	80-08-19	28.00	516	508	401	503	424	504	300	350
ALLENHURST BORO WD 4	80-08-19	10.00	590	570	505	567	525	565	120	500
RED BANK BORO WD 1B-50	80-08-20	40.00	702	692	632	688	637	687	150	1000
KEANSBURG BORO WD 4	80-09-18	10.00	356	351	258	342	280	340	10	1000
HIGHLANDS BORO WD 4-73	80-08-20	20.00	680	680	637	--	630	680	1440	600
HIGHLANDS BORO WD 3-73	80-08-20	20.00	--	779	--	--	719	779	1440	350
ATL HIGHLANDS WD 4-80	80-08-20	15.00	--	560	--	--	--	--	120	750
ATL HIGHLANDS BORO WD 2	80-08-20	15.00	--	200	--	--	180	200	180	130
MATAWAN BORO WD 3	80-09-18	90.00	--	271	220	273	231	271	1440	325
KEANSBURG BORO WD 5A	80-09-18	10.00	352	350	249	352	290	350	10	1000
W KEANSBURG WC-HAZLET 1	80-09-18	59.00	--	367	--	--	327	366	360	1000
W KEANSBURG WC-HAZLET 2	80-09-18	44.00	--	352	--	--	312	352	360	1000
KEYPORT BORO WD 7	80-09-18	35.00	414	365	--	--	304	354	180	1000
KERR GLASS CO	80-09-18	20.00	316	315	175	315	285	315	10	200
ABERDEEN TWP WD 1-56	80-09-18	80.00	--	487	--	--	447	487	120	700
MATAWAN BORO WD 1	80-09-18	30.00	268	235	214	259	210	235	150	350
SEA COAST PRODUCTS 1	80-08-20	10.00	--	420	--	--	--	--	10	650
KEANSBURG BORO WD 6-68	80-09-18	10.00	--	362	--	--	302	362	720	1000
KEANSBURG BORO WD 3	80-09-18	12.00	--	355	306	354	308	348	10	800
UNION BEACH BORO WD 2-69	79-10-24	10.00	307	294	260	290	262	289	10	400
INT FLAVOR FRAG 2	80-09-19	10.00	--	326	--	--	302	326	15	300
INT FLAVOR FRAG 1	80-09-19	10.00	--	328	265	331	298	328	720	130
NPS-SANDY HOOK 5A-70	80-08-20	10.00	--	878	--	--	838	878	10	500

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OCEAN COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
455	LONG BEACH TWP WD 2	39 32 06	074 15 48	01	122KRKD	80-08-14	16.0	137	7.1	1.5
590	BEACH HAVEN BORO WD 9-75	39 33 42	074 14 31	01	122KRKD	80-08-14	17.0	64	6.2	3.0
459	LONG BEACH WC-TERRACE 2	39 35 10	074 13 30	02	122KRKD	80-08-14	17.0	55	5.9	3.2
460	LONG BEACH WC-BRANT 2	39 37 24	074 11 51	01	122KRKD	80-08-14	17.0	56	5.9	3.5
544	SHIP BOTTOM BORO WD 4	39 38 39	074 10 52	01	122KRKD	80-08-14	16.5	59	6.1	3.1
560	SURF CITY BORO WD 4	39 39 38	074 10 06	01	122KRKD	80-08-14	17.0	59	6.2	3.2
557	STAFFORD WC 3	39 40 42	074 14 11	01	122KRKD	80-08-19	14.0	49	5.8	3.4
111	HARVEY CEDARS BORO WD 4	39 41 34	074 08 32	01	122KRKD	80-08-15	17.0	68	6.5	2.8
566	UNION-UNKNOWN FLOWING	39 44 44	074 12 10	01	121CNSY	80-08-19	14.5	48	4.5	5.3
2	BARNEGAT LIGHT BORO WD 3	39 45 22	074 06 36	01	124MQVC	80-08-15	17.5	348	8.3	1.7
4	BARNEGAT LIGHT BORO WD 2	39 45 24	074 06 32	01	124MQVC	80-08-15	17.5	342	8.3	1.6
512	OCEAN TWP MUA 1-60	39 47 44	074 11 29	01	121CNSY	80-08-19	13.5	48	4.6	4.5
22	SHORE WATER CO 1	39 54 22	074 04 58	01	122KRKD	80-08-13	14.0	56	5.8	4.8
541	SEASIDE PARK BORO WD 2	39 54 51	074 04 55	01	124MQVC	80-08-13	15.0	196	7.9	.9
13	BEACHWOOD BORO WD 4	39 55 30	074 12 21	01	121CNSY	80-08-20	13.5	48	4.5	7.5
508	OCEAN GATE BORO WD 3	39 55 28	074 08 26	01	121CNSY	80-08-20	14.0	48	5.2	6.0
-	SEASIDE PARK WD 6-77	39 55 47	074 04 34	02	124MQVC	80-08-13	16.0	244	8.7	1.1
538	SEASIDE HTS BORO WD 1R	39 56 36	074 04 39	03	121CKKD	80-08-13	14.5	375	6.1	83
115	ISLAND HTS BORO WD 8	39 56 39	074 08 54	01	124MQVC	80-08-20	13.5	94	6.3	4.5
-	SEASIDE HTS BORO WD 5-78	39 56 52	074 04 42	01	121CKKD	80-08-13	14.0	73	5.8	7.8
62	TOMS RIVER WC 16	39 57 19	074 12 33	01	122KRKD	80-08-20	13.5	103	6.4	3.2
452	LAVALLETTE BORO WD 3	39 57 41	074 04 37	01	211EGLS	80-08-13	22.0	344	8.3	2.0
453	LAVALLETTE BORO WD 4	39 58 08	074 04 16	01	211MGRR	80-08-13	24.0	172	7.5	1.0
80	OCEAN CO COLLEGE 2-70	40 00 05	074 09 37	01	121CNSY	80-08-20	14.0	54	5.1	8.1
100	OCEAN CO WC-NORMANDY 3	39 59 56	074 03 44	02	211MGRR	80-08-12	24.5	168	7.3	.9
-	TOMS RIVER WC-ANCHORAGE	40 00 02	074 08 37	01	122KRKD	80-08-20	14.0	74	6.3	3.9
504	OCEAN CO WC-MANTOLKING 7	40 02 10	074 03 10	02	211MGRR	80-08-12	25.0	160	7.3	.9
6	OCEAN CO WC BAYHEAD 6	40 04 05	074 02 44	01	211EGLS	80-08-12	21.0	203	7.9	.8
530	PT PLEASANT BORO WD 6	40 04 54	074 04 13	01	211EGLS	80-08-12	21.0	187	8.0	.9
531	PT PLEASANT BORO WD 5	40 04 54	074 04 14	01	211MGRR	80-08-12	25.0	144	6.9	1.0
533	PT PLEASANT BORO WD 4	40 05 01	074 04 55	01	121CKKD	80-08-12	13.5	198	5.2	19
521	PT PLEAS BCH BORO WD 9	40 05 36	074 02 52	01	121CKKD	80-08-12	14.5	620	6.6	170
523	PT PLEAS BCH BORO WD 10	40 05 51	074 02 43	01	121CKKD	80-08-12	14.0	712	6.4	180

Geologic unit (aquifer):

121CNSY - Cohansey Sand

121CKKD - Cohansey Sand-Kirkwood Formation, Undifferentiated

122KRKD - Kirkwood Formation

124MQVC - Manasquan-Vincentown Formations, Undifferentiated

211EGLS - Englishtown Formation

211MGRR - Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OCEAN COUNTY--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
LONG BEACH TWP WD 2	80-08-14	10.00	--	458	420	456	425	458	60	240
BEACH HAVEN BORO WD 9-75	80-08-14	30.00	--	635	--	--	552	635	60	800
LONG BEACH WC-TERRACE 2	80-08-14	5.00	592	578	517	578	524	578	180	1000
LONG BEACH WC-BRANT 2	80-08-14	6.00	580	580	535	--	530	580	300	500
SHIP BOTTOM BORO WD 4	80-08-14	5.00	605	590	510	597	536	578	120	750
SURF CITY BORO WD 4	80-08-14	5.00	560	560	499	550	517	557	10	650
STAFFORD WC 3	80-08-19	8.00	436	428	386	428	384	427	--	--
HARVEY CEDARS BORO WD 4	80-08-15	5.00	508	503	400	--	465	500	45	500
UNION-UNKNOWN FLOWING	80-08-19	10.00	--	155	--	--	--	--	--	--
BARNEGAT LIGHT BORO WD 3	80-08-15	7.00	657	657	--	--	597	654	--	--
BARNEGAT LIGHT BORO WD 2	80-08-15	7.00	675	646	570	660	593	646	--	--
OCEAN TWP MUA 1-60	80-08-19	10.00	160	160	125	160	140	160	10	200
SHORE WATER CO 1	80-08-13	10.00	203	203	--	--	177	200	60	550
SEASIDE PARK BORO WD 2	80-08-13	6.00	525	525	470	516	476	525	10	250
BEACHWOOD BORO WD 4	80-08-20	60.00	--	99	--	--	65	97	10	325
OCEAN GATE BORO WD 3	80-08-20	7.00	--	120	--	--	--	--	10	325
SEASIDE PARK WD 6-77	80-08-13	12.00	--	450	--	--	--	--	1440	400
SEASIDE HTS BORO WD 1R	80-08-13	5.00	175	175	138	--	144	175	1440	1100
ISLAND HTS BORO WD 8	80-08-20	17.00	--	292	--	--	115	292	720	450
SEASIDE HTS BORO WD 5-78	80-08-13	5.00	--	175	--	--	--	--	10	900
TOMS RIVER WC 16	80-08-20	8.00	--	226	--	--	196	226	720	725
LAVALLETTE BORO WD 3	80-08-13	7.00	1219	1180	1110	1187	1120	1180	300	425
LAVALLETTE BORO WD 4	80-08-13	5.00	1642	1515	1337	1580	1358	1515	720	650
OCEAN CO COLLEGE 2-70	80-08-20	15.00	90	80	--	--	66	80	10	60
OCEAN CO WC-NORMANDY 3	80-08-12	8.00	1509	1479	1416	1486	1428	1479	120	360
TOMS RIVER WC-ANCHORAGE	80-08-20	5.00	--	233	--	--	203	233	1440	350
OCEAN CO WC-MANTOLKING 7	80-08-12	10.00	1456	1369	1219	1361	1263	1369	180	680
OCEAN CO WC BAYHEAD 6	80-08-12	10.00	825	818	775	819	778	818	1440	360
PT PLEASANT BORO WD 6	80-08-12	20.00	984	790	739	799	730	790	1440	400
PT PLEASANT BORO WD 5	80-08-12	18.00	1414	1342	--	1361	1256	1342	240	1200
PT PLEASANT BORO WD 4	80-08-12	13.00	178	75	28	75	45	75	180	300
PT PLEAS BCH BORO WD 9	80-08-12	11.00	168	134	95	--	96	134	1440	700
PT PLEAS BCH BORO WD 10	80-08-12	10.00	--	130	--	--	86	130	1440	700

PAGE

Absecon Creek at Absecon.......281,311,330
Accuracy of data and computed results....... 11
Acknowledgments....... 1
Acre-foot, definition of....... 2
Adenosine triphosphate, definition of....... 2
Albertson Brook near Hammonton....... 300
Algae, definition of....... 2
Algal growth potential (AGP), definition of....... 2
Allendale, Hohokus Brook at....... 303
  Ramsey Brook at....... 303
Allenwood, Manasquan River at....... 307
Ambrose Brook at Middlesex....... 298
Applegarth, Millstone River at.......175,298,324
Aquifer code list....... 2
Aquifer, definition of....... 2
Artesian, definition of....... 3
Ash mass, definition of....... 3
Atco, Mullica River near.......299,307
Atlantic City, Beach Thorofare at....... 311
Atlantic County, ground-water levels....... 330
  Ground-water quality....... 350
Atsion, Clarks Branch near....... 299
  Mullica River at....... 299
  Mullica River at outlet of Atsion Lake at.......255,329
  Sleeper Branch near....... 299
  Springers Brook near....... 300
Avalon, Ingram Thorofare at....... 311
Awosting, Wanaque River at....... 63,315

Back Brook tributary near Ringoes.......138,320
Bacteria, definition of....... 3
Baldwin Creek at Pennington....... 305
Barclay Brook near Englishtown.......211,298,326
Barnegat Bay at Barnegat Light....... 310
  at Bay Shore....... 310
  at Mantoloking....... 310
Barnegat Light, Barnegat Bay at....... 310
Bass River, East Branch, near New Gretna.......278,330
Batsto, Mullica River near.......257,329
  Sleeper Branch at....... 299
Batsto River at Batsto.......261,330
  at Pleasant Mills.......264,310
Bay Shore, Barnaget Bay at....... 310
Beach Haven, Little Egg Harbor at....... 310
Beach Thorofare at Atlantic City....... 311
Bear Brook at Route 535 near Locust Corner....... 304
Beden Brook near Hopewell....... 305
  near Rocky Hill.......186,306,324
Bed material, definition of....... 3
Bedload, definition of....... 3
Beesleys Point, Great Egg Harbor Bay at....... 311
Belcher Creek at Stowaway Road at West Milford....... 296
  Tributary at West Milford....... 296
  at West Milford....... 296
Belle Mead, Pike Run at....... 188
  Royce Brook tributary at....... 192
Belleville, Second River at....... 303
Berkeley Heights, Blue Brook at Seeleys Pond Dam near 306
Bernardsville, Passaic River near....... 302
Berryland, Hospitality Brook at....... 300
Big Brook near Marlboro....... 306
Biochemical oxygen demand, definition of....... 3
Biomass, definition of....... 3
Black Creek near Vernon.......35,296,313
Black River: See Lamington River
Blackwells Mills, Millstone River at.......189,324
Blawenburg, Rock Brook near....... 305
Blue Anchor, Blue Anchor Brook near.......300,307
  Great Egg Harbor River near.......284,331
  Pump Branch near....... 299
Blue Anchor Brook near Blue Anchor.......300,307
Blue Brook at Seeleys Pond Dam near Berkeley Heights. 306
Blue green algae, definition of....... 5
Boonton Reservoir data....... 98
Boonton, Rockaway River above Reservoir, at....... 50
  Rockaway River below Reservoir, at....... 51,314
Bound Brook, Raritan River below Calco Dam, at.......193,325
  at South Plainfield....... 298
Brookville, Oyster Creek near.......153,329
Budd Lake, SB Raritan River at outlet of.......113,297,318
Burlington County, ground-water levels....... 332
Burnt Mills, Lamington River at.......165,323
  North Branch Raritan River at.......146,321
Bushkill Brook at Rockefellows Mills.......131,320

Camden County, ground-water levels.......334,335
Canistear Reservoir....... 97
Canoe Brook near Summit.......100,314
Cape May, Cape May Harbor at....... 312
Cape May County, ground-water quality....... 351
Cape May Harbor at Cape May....... 312
Carnegie Lake, Millstone River at, at Princeton....... 305

PAGE

Cedar Brook at South Plainfield....... 298
Cedar Creek at Lanoka Harbor.......307,310
Cells/volume, definition of....... 3
Cfs-day, definition of....... 3
Charlotteburg Reservoir data....... 99
Chatham, Passaic River near....... 47,314
Chatsworth, West Branch Wading River near....... 300
Chemical oxygen demand, definition of....... 3
Chesilhurst, Hays Mill Creek near....... 299
  Wildcat Branch at.......299,307
Chester, North Branch Raritan River near.......142,297,321
Chlorophyll, definition of....... 3
Clarks Branch near Atsion....... 299
Clarksville, Duck Pond Run at....... 305
Clinton Reservoir data....... 99
Clinton, Spruce Run at.......125,319
Closter, Tenakill Brook at....... 302
Collection and computation of data....... 9
Collection and examination of data....... 11
Colonia, South Branch Rahway River at....... 297
Color unit, definition of....... 3
Colts Neck, Yellow Brook at.......226,327
Commonwealth Water Company, diversions....... 100
Computations, accuracy of results....... 11
Contents, definition of....... 3
Continuing record station, definition of....... 3
Control, definition of....... 3
Control structure, definition of....... 3
Cooley Brook near West Milford....... 297
Cooperation....... 1
Crest-stage partial-record stations....... 302
Crook Horn Creek at Ocean City....... 311
Cubic feet per second per square mile, definition of. 4
Cubic foot per second, definition of....... 4
Cumberland County, ground-water levels....... 335

Deep Run at Weymouth....... 301
Definition of terms....... 2
De Forest Lake, NY....... 42
Depth of well, definition of....... 4
Diatoms, definition of....... 6
Discharge at miscellaneous sites.......296,302
Discharge, definition of....... 4
Dissolved, definition of....... 4
Diversity index, definition of....... 4
Downstream order and station number....... 8
Drainage area, definition of....... 4
Drainage basin, definition of....... 4
Dry mass, definition of....... 3
Duck Pond Run at Clarksville....... 305
  near Princeton Junction....... 305
Dwars Kill at Norwood....... 296

East Spotswood, Iresick Brook at....... 299
Echo Lake....... 98
Egg Harbor, Landing Creek at Philadelphia Ave. at....... 300
Elizabeth, Elizabeth River at Ursino Lake at....... 101
Elizabeth River at Ursino Lake at Elizabeth....... 101
Elizabethtown Water Company, diversions....... 223
Elmwood Park, Fleischer Brook at Market Street at....... 303
  Passaic River at Route 46 at....... 88,316
Englewood, Metzler Brook at....... 302
Englishtown, Barclay Brook near.......211,298,326
  Matchaponix Brook near.......209,298,325
Essex County, ground-water levels....... 336
Explanation of ground-water level records....... 13
Explanation of stage and water-discharge records....... 9
Explanation of water-quality records....... 11

Fair Lawn, Saddle River at....... 91,316
Far Hills, North Branch Raritan River near.......144,321
Farmingdale, Mingamahone Brook at....... 306
Farrington Dam, Lawrence Brook at.......207,325
Fecal coliform bacteria, definition of....... 3
Fecal streptococcal bacteria, definition of....... 3
Fleischer Brook at Market Street at Elmwood Park....... 303
Flemington, Walnut Brook near....... 304
Folsom, Great Egg Harbor River at....... 286
Fourmile Branch at New Brooklyn....... 307
  at Winslow Crossing....... 300
Franklin, Wallkill River at....... 28,313

Gage height, definition of....... 4
Gaging station, definition of....... 4
Georgia, Manasquan River near.......236,299,306,328
Glen Gardner, Spruce Run at.......119,318
  Spruce Run near.......120,319
Glenmoore, Stony Brook at....... 304
Grassy Sound at West Wildwood....... 312
Great Channel at Stone Harbor....... 312
Great Egg Harbor Bay at Beesleys Point....... 311
  at Ocean City....... 311

PAGE

Great Egg Harbor River at Folsom........ 286
  at Weymouth........ 292,331
  near Blue Anchor........ 284,331
  near Sicklerville........ 282,300,331
  tributary at Sicklerville........ 282,300
Green algae, definition of........ 6
Green Brook at Plainfield........ 196,325
  at Seeley Mills........ 195,306,325
  near West Milford........ 297
Greenwood Lake........ 98
Ground-water level records........ 330
Ground-water quality records........ 350
Grovers Mill, Millstone River at........ 177,324
  Millstone River at Southfield Road near........ 304

Hackensack River at New Milford........ 41,314
  at Rivervale........ 38,314
  at West Nyack, NY........ 37
Hackensack River basin, diversions........ 43
  Elevation........ 42
  Reservoirs in,........ 42
Hackensack Water Co., diversions........ 43
Hamden Pumping Station, diversions........ 223
Hammonton, Albertson Brook near........ 300
Hammonton Creek at Wescoatville........ 260,330
Hardness, definition of........ 4
Harrisville, Oswego River at........ 275,330
Hart Brook near Pennington........ 305
Hays Mills Creek near Chesilhurst........ 299
Head of River, Tuckahoe River at........ 294,311,331
Heathcote Brook at Kingston........ 182,298,324
High Bridge, South Branch Raritan River near........ 117,318
  SB Raritan River at Arch Street at........ 118,318
  Spruce Run near........ 297
Highland Park, Mill Brook at........ 298
High tide, definition of........ 4
Hohokus, Hohokus Brook at........ 90,316
Hohokus Brook at Allendale........ 303
  at Hohokus........ 90,316
Holland Brook at Readington........ 141,320
Holmdel, Willow Brook near........ 224,327
Hopewell, Beden Brook near........ 305
Hospitality Branch at Berryland........ 301
Hudson River basin, discharge measurements at
    miscellaneous sites........ 308
Hydrologic bench-mark station, definition of........ 9
Hydrologic conditions........ 2
Hydrologic unit, definition of........ 4

Ingram Thorofare at Avalon........ 311
Instantaneous discharge, definition of........ 4
Instantaneous flow rate, definition of........ 4
Introduction........ 1
Iresick Brook at East Spotswood........ 299
Ironia, Lamington (Black) River near........ 149,321
  Lamington River tributary near........ 298

Jenkins, Tulpehocken Creek near........ 300
  West Branch Wading River near........ 265,330
Jersey City, diversions........ 100
Johns-Manville Corporation, diversions........ 223
Jumping Brook near Neptune City........ 234,328

Keyport, Luppatatong Creek at........ 310
Kingston, Heathcote Brook at........ 182,298,324
  Millstone River at........ 184,324

Lake Mohawk, Wallkill River at outlet of, at Sparta.. 296
Lakes and reservoirs
  Boonton Reservoir........ 97
  Canistear Reservoir........ 97
  Charlotteburg Reservoir........ 97
  Clinton Reservoir........ 97
  De Forest Lake........ 42
  Echo Lake........ 98
  Farrington Reservoir........ 207
  Greenwood Lake........ 98
  Oak Ridge Reservoir........ 97
  Oradell Reservoir........ 42
  Osborn Pond, diversion........ 44
  Point View Reservoir........ 100
  Round Valley Reservoir........ 222
  Splitrock Reservoir........ 97
  Spruce Run Reservoir........ 222
  Swimming River Reservoir........ 228
  Tappan, Lake........ 42
  Wanaque Reservoir........ 98
  Woodcliff Lake........ 42
Lakewood, North Branch Metedeconk River near........ 243,329
Lamington, Lamington (Black) River at........ 157,322
Lamington (Black) River at Burnt Mills........ 165,323
  at Lamington........ 157,322

PAGE

  at Succasunna........ 148,321
  near Ironia........ 149,321
  near Pottersville........ 152,322
  tributary near Ironia........ 298
  tributary No. 2 near Pottersville........ 156,322
Landing Creek at Phila. Ave. at Egg Harbor City...... 300
Land surface datum, definition of........ 4
Lanoka Harbor, Cedar Creek at........ 307,310
Lawrence Brook at Davidsons Mill Road near Patricks
    Corner........ 206,325
  at Farrington Dam........ 207,325
  at Westons Mills........ 208,325
Lebanon, SB Rockaway Creek tributary at........ 159,322
Little Bear Brook at Penns Neck........ 304
Little Egg Harbor, Beach Haven at........ 310
Little Falls, Passaic River at........ 80
Locust Corner, Bear Brook at Route 535 near........ 304
Lodi, Saddle River at........ 93
Low-flow partial-record stations........ 296
Low tide, definition of........ 4
Ludlam Thorofare at Sea Isle City........ 311
Luppatatong Creek at Keyport........ 310

Macopin Intake Dam, Pequannock River at........ 62,315
Mahwah, Ramapo River near........ 72,315
Mahwah River near Suffern, NY........ 71
Manahawkin Bay near Manahawkin........ 310
Manalapan Brook at Bridge Street at Spotswood........ 216,326
  at Federal Road near Manalapan........ 215,326
  at Spotswood........ 217,326
  near Manalapan........ 298
Manalapan, Manalapan Brook at Federal Road near...... 215,326
Manasquan River at Allenwood........ 307
  at Squankum........ 240,328
  near Georgia........ 236,299,306,328
Mantoloking, Barnegat Bay at........ 310
Manville, Raritan River at........ 172,323
Marlboro, Big Brook near........ 306
Marsh Bog Brook at Squankum........ 238,328
Martinsville, West Branch Middle Brook near........ 194,325
Matchaponix Brook near Englishtown........ 209,298,325
  at Mundy Avenue at Spotswood........ 213,326
Maxwell, West Branch Wading River at........ 270
Mean concentration, definition of........ 6
Mean discharge, definition of........ 4
Mean high or low tide, definition of........ 4
Mercer County, ground-water levels........ 336
Metamorphic stage, definition of........ 5
Metedeconk River, North Branch, near Lakewood........ 243,329
    near Wyckoff Mills........ 241,329
Methylene blue active substance, definition of....... 5
Metzler Brook at Englewood........ 302
Micrograms per gram, definition of........ 5
Micrograms per liter, definition of........ 5
Middle Brook, West Branch, near Martinsville........ 194,325
Middle Valley, South Branch Raritan River at..... 113,297,318
Middlebush, Six Mile Run near........ 306
Middlesex, Ambrose Brook at........ 298
Middlesex County, ground-water levels........ 337,340
  ground-water quality........ 352
Mill Brook at Highland Park........ 298
Milligrams per liter, definition of........ 5
Millington, Passaic River near........ 44,314
Millstone River at Applegarth........ 175,298,324
  at Blackwells Mills........ 189,324
  at Carnegie Lake at Princeton........ 305
  at Grovers Mill........ 177,324
  at Kingston........ 184,324
  at Southfield Road near Grovers Mill........ 304
  at Plainsboro........ 304,324
  at Weston........ 190
Mingamahone Brook at Farmingdale........ 306
Miscellaneous sites........ 296,302
Molly Anne Brook at North Haledon........ 303
Monks, Wanaque River at........ 64,315
Monmouth County, ground-water levels........ 340
  ground-water quality........ 353
Morsetown Broook at West Milford........ 297
Morris County, ground-water levels........ 344
Morristown, Whippany River at........ 54,314
Mulhockaway Creek at Van Syckel........ 122,319
  tributary at Van Syckel........ 297
Mullica River at Atsion........ 299
  at outlet of Atsion Lake at Atsion........ 255,329
  at Pleasant Mills........ 258,329
  near Atco........ 299,307
  near Batsto........ 257,329
  near Port Republic........ 311
Musquapsink Brook at Westwood........ 302
  near Westwood........ 302

Neptune City, Jumping Brook near........ 234,328

PAGE

  Shark River near..........231,328
Nescochague Creek at Pleasant Mills.......... 300
Neshanic River at Reaville..........135,320
Newark City of, diversions.......... 100
New Brooklyn, Fourmile Branch at.......... 307
New Gretna, East Branch Bass River near..........278,330
New Milford, Hackensack River at.......... 41,314
North Branch, North Branch Raritan River at..........167,323
North Haledon, Molly Anne Brook at.......... 303
North Jersey District Water Supply Commission,
    diversions.......... 100
North Plainfield, Stony Brook at.......... 306
Norwood, Dwars Kill at.......... 296
  Tenakill Brook tributary at.......... 296
Numbering system for wells and miscellaneous sites... 8

Oak Ridge Reservoir data.......... 97
Oakland, Pond Brook at.......... 303
Ocean City, Crook Horn Creek at.......... 311
Ocean City, Great Egg Harbor Bay at.......... 311
Ocean County, ground-water levels.......... 345
  ground-water quality.......... 355
Old Bridge, South River at..........220,327
  South River below Duhernal Lake at..........221,327
Oradell Reservoir data.......... 42
Organic mass, definition of.......... 3
Organism, definition of.......... 5
Organism count/area, definition of.......... 5
Organism count/volume, definition of.......... 5
Oswego River at Harrisville..........275,330
  at Oswego Lake.......... 300
Other data available.......... 11
Oyster Creek near Brookville..........253,329

Packanack Lake, Pompton River at.......... 77,316
Papakating Creek at Sussex.......... 32,313
Partial-record stations, crest-stage.......... 302
  Definition of.......... 5
  Low-flow.......... 296
  Tidal Crest-stage.......... 308
Particle size, definition of.......... 5
Particle-size classification.......... 5
Pascack Brook at Westwood.......... 40,314
Passaic County, ground-water levels.......... 349
Passaic River at Little Falls.......... 80
  at Pine Brook.......... 59,315
  at Route 46 at Elmwood Park.......... 88,316
  at Route 46 at Singac.......... 79,316
  at Two Bridges.......... 60,315
  near Bernardsville.......... 302
  near Chatham.......... 47,314
  near Millington.......... 44,314
Passaic River basin, crest-stage partial-record
    stations in.......... 302
  Diversions.......... 100
  Gaging-station records in.......... 44
  Reservoirs in,.......... 97
    Elevation.......... 99
Passaic Valley Water Commission, diversions.......... 100
Passaic, Third River at.......... 196
Patricks Corner, Lawrence Brook at Davidsions
    Mill Road near..........206,325
Peckman River at Ozone Avenue at Verona.......... 303
Pennington, Baldwin Creek at.......... 305
  Hart Brook near.......... 305
Penns Neck, Little Bear Brook.......... 304
Pequannock River at Macopin Intake Dam.......... 62,315
Percent composition, definition of.......... 5
Periphyton, definition of.......... 5
Perth Amboy, Raritan River at.......... 310
Pesticides, definition of.......... 5
Peters Brook near Raritan..........171,323
Phytoplankton, definition of.......... 5
Picocurie, definition of.......... 5
Pike Run at Belle Mead.......... 188
Pine Brook, Passaic River at.......... 59,315
  Rockaway River at..........52,296,314
  Whippany River near..........57,296,315
Plainfield, Green Brook at..........196,325
Plainsboro, Millstone River at.......... 304
Plankton, definition of.......... 5
Pleasant Mills, Batsto River at..........264,310
  Mullica River at..........258,329
  Nescochague Creek at.......... 300
Point View Reservoir.......... 100
Polychlorinated biphenyls, definition of.......... 6
Pompton Lakes, Ramapo River at.......... 75,315
Pompton Plains, Pompton River at.......... 76,316
Pompton River at Packanack Lake.......... 77,316
  at Pompton Plains.......... 76,316
Pond Brook at Oakland.......... 303
Port Republic, Mullica River near.......... 311

PAGE

Pottersville, Lamington (Black) River near..........152,322
  Lamington (Black) River tributary No. 2 near..........156,322
  Upper Cold Brook near..........155,322
Preakness (Signac) Brook near Preakness.......... 303
Prescott Brook at Round Valley..........129,319
Primary productivity, definition of.......... 6
Princeton Junction, Duck Pond Run near.......... 305
Princeton, Millstone River at Carnegie Lake at.......... 305
  Stony Brook at..........179,324
Publications, ground water.......... 13
  water quality.......... 13
  techniques of water-resources investigations.......... 16
Pump Branch near Blue Ancora.......... 299

Quality of ground-water records.......... 352

Radioisotopes, definition of.......... 6
Rahway, Rahway River at.......... 107
  Robinsons Branch, Rahway River at.......... 110
Rahway River at Rahway.......... 107
  Robinsons Branch, at Rahway.......... 110
  near Springfield.......... 104
  South Branch at Colonia.......... 297
Ramapo River at Pompton Lakes.......... 75,315
  at Suffern, NY.......... 69
  near Mahwah.......... 72,315
Ramsey Brook at Allendale.......... 303
Raritan, Peters Brook near..........171,323
  North Branch Raritan near..........168,323
  Raritan River at..........169,323
Raritan River at Manville..........172,324
  at Perth Amboy.......... 310
  at Raritan..........169,323
  below Calco Dam, at Bound Brook..........193,225
  near South Bound Brook.......... 199
  North Branch, at Burnt Mills..........146,321
    at North Branch..........167,323
    near Chester..........142,297,321
    near Far Hills..........144,311
    near Raritan..........168,323
  South Branch, at Arch Street at High Bridge..........118,318
    at Middle Valley..........115,297,318
    at outlet of Budd Lake..........113,297,318
    at South Branch..........139,320
    at Stanton..........128,319
    at Three Bridges..........133,320
    near High Bridge..........117,318
Raritan River basin, discharge measurements at
    miscellaneous sites.......... 308
  crest-stage partial-record stations in.......... 304
  Diversions.......... 223
  Low-flow partial-record stations in.......... 297
  Reservoirs in,.......... 222
    Elevation.......... 222
Readington, Holland Brook at..........141,320
Reaville, Neshanic River at..........135,320
Red Bank, Swimming River near..........228,327
Remark Codes for water-quality data.......... 13
Reservoirs: See Lakes and reservoirs
Ridgefield, Wolf Creek at.......... 302
Ridgewood, Saddle River at.......... 89,316
Ringoes, Back Brook tributary near..........138,320
River mile, definition of.......... 6
Rivervale, Hackensack River at.......... 38,314
  Robinsons Branch Rahway River at Rahway.......... 110
Rock Brook near Blawenburg.......... 305
Rockaway Creek at Whitehouse..........162,323
  South Branch, tributary at Lebanon..........159,322
    at Whitehouse..........161,322
Rockaway River above Reservoir, at Boonton.......... 50
  at Pine Brook..........52,296,314
  below Reservoir, at Boonton.......... 51,314
Rockefellows Mills, Bushkill Brook at..........131,320
Rocky Hill, Beden Brook near..........186,306,324
Round Valley, Prescott Brook at..........129,319
Round Valley Reservoir data.......... 222
Royce Brook tributary at Belle Mead.......... 192
Runoff in inches, definition of.......... 6

Saddle River at Lodi.......... 93
  at Fair Lawn.......... 91,316
  at Ridgewood.......... 89,316
  at Upper Saddle River.......... 303
Sea Isle City, Ludlam Thorofare at.......... 311
Second River at Belleville.......... 303
Sediment, definition of.......... 6
Seeley Mills, Green Brook at..........195,306,325
Seeleys Pond Dam near Berkeley Heights, Blue Brook at 306
Selected references.......... 14
Shark River near Neptune City..........231,328
Sicklerville, Great Egg Harbor River near..........282,300,331
  Great Egg Harbor River tributary at..........282,300

PAGE

Singac, Passaic River at Route 46 at 79,316
Six Mile Run near Middlebush 306
Sleeper Branch at Batsto 299
  near Atsion 299
Solute, definition of 6
South Bound Brook, Raritan River near 199
South Plainfield, Bound Brook at 298
  Cedar Brook at 298
South Branch, South Branch Raritan River at 139,320
South River at Old Bridge 220,327
  below Duhernal Lake at Old Bridge 221,327
Sparta, Wallkill River at outflow of Lake Mohawk
    at 26,296,313
Special networks and programs 9
Splitrock Reservoir data 97
Spotswood, Manalapan Brook at Bridge Street at 218,326
  Manalapan Brook at 217,326
  Matchaponix Brook at Mundy Avenue at 213,326
Spring Valley Water Company, diversions 43
Springers Brook near Atsion 300
Springfield, Rahway River near 104
Spruce Run at Clinton 125,319
  at Glen Gardner 119,318
  near Glen Gardner 120,319
  near High Bridge 297
Spruce Run Reservoir data 222
Squankum, Manasquan River at 240,328
  Marsh Bog Brook at 238,328
Stafford Forge, Westecunk Creek at 254,329
Stage-discharge relation, definition of 6
Stanton, South Branch Raritan River at 128,319
Stone Harbor, Great Channel at 312
Stony Brook at Glenmoore 304
  at North Plainfield 306
  at Princeton 179,324
  at Watchung 198,325
  East Branch, at Watchung 197
Streamflow, definition of 7
Succasunna, Lamington (Black) River at 148,321
  Succasunna Brook near 297
Suffern, NY, Mahwah River near 71
  Ramapo River at 69
Summit, Canoe Brook near 100,314
Sussex, Papakating Creek at 32,313
  Wallkill River near 31,313
Suspended sediment, definition of 6
Suspended-sediment concentration, definition of 6
Suspended sediment data 311
Suspended-sediment discharge, definition of 6
Swimming River near Red Bank 228,327

Tappan, Lake 42
Tenakill Brook at Closter 302
  tributary at Norwood 296
Terms, definition of 2
Thermograph, definition of 7
Third River at Passaic 96
Three Bridges, South Branch Raritan River at 133,320
Tidal crest-stage stations 308
Toms River near Toms River 244
Tons per day, definition of 7
Total, definition of 7
Total coliform bacteria, definition of 3
Total depth of hole, definition of 4
Total depth of well, definition of 4
Total organism count, definition of 5
Tuckahoe River at Head of River 294,311,331
Tuckerton Cove near Tuckerton 310
Tulpehocken Creek near Jenkins 300
Two Bridges, Passaic River at 60,315

Union County, ground-water levels 349
Unionville, NY, Wallkill River near 34
Upper Cold Brook near Pottersville 155,322
Upper Saddle River, Saddle River at 303
Ursino Lake, Elizabeth River at, at Elizabeth 101

Van Syckel, Mulhockaway Creek at 122,319
  Mulhockaway Creek tributary at 297
Vernon, Black Creek near 35,296,313
Verona, Peckman River at Ozone Avenue at 303

Wading River, West Branch, at Chatsworth 300
  at Maxwell 270
  near Chatsworth 300
  near Jenkins 265,330
Wallkill River at Franklin 28,313
  at Outflow of Lake Mohawk at Sparta 26,296,313
  near Sussex 31,313
  near Unionville, NY 34
Walnut Brook near Flemington 304
Wanaque, Wanaque River at 65,315

PAGE

Wanaque Reservoir data 99
Wanaque River at Awosting 63,315
  at Monks 64,315
  at Wanaque 65,315
Watchung, East Branch Stony Brook at 197
  Stony Brook at 198,325
Water temperature 12
Wescoatville, Hammonton Creek at 260,330
West Milford, Belcher Creek at 296
  Belcher Creek at Stowaway Road at 296
  Belcher Creek Tributary at 296
  Cooley Brook near 297
  Green Brook near 297
  Morsetown Brook at 297
West Nyack, NY, Hackensack River at 37
  diversions 43
West Wildwood, Grassy Sound at 312
Westecunk Creek at Stafford Forge 254,329
Weston, Millstone River at 190,324
Westons Mills, Lawrence Brook at 208,325
Westwood, Musquapsink Brook at 302
  Musquapsink Brook near 302
  Pascack Brook at 40,314
Wet mass, definition of 3
Weymouth, Deep Run at 301
  Great Egg Harbor River at 292,331
Whippany River at Morristown 54,314
  near Pine Brook 57,296,315
Whitehouse, Rockaway Creek at 162,323
  South Branch Rockaway Creek at 161,322
Wildcat Branch at Chesilhurst 299,307
Willow Brook near Holmdel 224,327
Winslow Crossing, Fourmile Branch at 300
Wolf Creek at Ridgefield 302
Woodcliff Lake data 42
Woodsville Brook at Woodsville 298,304
WDR, definition of 8
WSP, definition of 8
Wyckoff Mills, NB Metedeconk River near 241,329

Yellow Brook at Colts Neck 226,327

Zooplankton, definition of 6

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons